

YOUTH'S INTRODUCTION

Josiah TO *Hewlett* Trade and Business:

CONTAINING,

1817

- | | |
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| <p>I. Tables of the most usual <i>Clerk-like</i> Contractions of Words; with proper Directions how to Address Persons of <i>Elevated Rank</i>, and those in <i>Office</i>.</p> <p>II. <i>Acquittances</i> and <i>Promissory Notes</i> diversified, and adapted to such Circumstances as occur in <i>Real Business</i>.</p> <p>III. Variety of Bills of <i>Parcels</i>, and Bills on <i>Book-Debts</i>, to enter the <i>Learner</i> in the Manner and Methods of <i>Commerce</i>, and to make him ready at <i>Computation</i>.</p> <p>IV. Bills of <i>Exchange</i>, with necessary Directions for the right Understanding and Management of <i>Re-</i></p> | <p><i>mittances</i>; several <i>Orders</i> for Goods, <i>Letters</i> of Credit, <i>Invoices</i>, and other <i>Merchant-like</i> Examples.</p> <p>V. Authentic Forms of such <i>Law-Precedents</i>, as are most frequently met with in the Course of <i>Traffic</i>.</p> <p>VI. Small Collections of <i>Questions</i> interspersed, to exercise the <i>Learner</i> in the Common Rules of <i>Arithmetic</i>, to use him to <i>Calculation</i>, and to bring him acquainted with the <i>Use</i>, the <i>Properties</i> and <i>Excellency</i> of <i>Numbers</i>, by way of <i>Recreation</i>.</p> |
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The FIFTH EDITION, Corrected, Augmented, and considerably Improved.

By M. CLARE, ^RMaster of the ACADEMY in *Soho-Square*, *London*.

By whom YOUTH are Boarded, Educated, and qualified either for the University, the Compting-house, or the Publick Offices.

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YOUTH'S INTRADUCTION

Trade and Business:


ОБЪЕДИТЕЛЬНО

to the fact that the Government of the United States has been unable to obtain the necessary information from the Government of the United Kingdom to enable it to take the necessary steps to prevent the export of arms and munitions to the Government of the United States.

Small Collections of Great Interest, as
to the Law in the Common Rules of
the Court, to the King's Bench, and to
the High Court of Chancery, the Pro-
ceedings in the Court of Admiralty, by way of



17. A copy of the report of the Committee on the Administration of the Government of the District of Columbia, dated June 1, 1902, is herewith submitted for the information of the Senate.



The Fifth Edition, Corrected, Augmented, and considerably Improved.

THE M. C. A. R. I. M. of the Academy of Sciences, London.

ELWOOD W. BROWN, President for 1923-24, now agent of the Reed, Hastings, & Co. York, N. Y.

T O

Master *GEORGE ONSLOW*,

Only Son of the Right Honourable ARTHUR ONSLOW, Esq;
Speaker of the Honourable House of Commons.

DEAR SIR!



FROM the large experience I have had of your excellent Capacity, and your aimiable Disposition, I have pregnant hopes of your becoming one day a considerable, that is, a wise, a good, and a useful Man.

FROM this expectation it is, that I am ambitious of presenting you this Edition of a small Work, which I have the pleasure to imagine will be of service to You, Sir, when You come to dip into *NUMBERS*; a Qualification equal, if not superior in value, to the most of what we learn besides.

A

YOUR

DEDICATION.

YOUR Worthy Father sits, where he has been long a witness of the advantage, with which the Calculist and Accomptant are always heard. And no wonder; since arguments, drawn from Arithmetical computations, carry with them uncommon weight, having their foundation in Reason and in Truth. I am,

DEAR SIR,

Soho Square,
Jan. 1, 1742.

Your most Affectionate, and

most Obligated, Humble Servant,

Martin Clare.

The P R E F A C E.



N the commerce of the world, dispatch in business is no ordinary accomplishment; which being the result of a well-directed education, it cannot be amiss, in a Treatise of this nature, to touch on those parts of it, which are more immediately necessary for forming the man of business.

AFTER the youth's first years have been employed in READING his native language, and proper care has been taken to explain and inform him of the meaning and force of words, as they present; the next step is to initiate him in the rudiments of GRAMMAR: In which, at first, nothing is more material, than to be very particular in the regular division and formation of syllables. While this is doing, it is necessary for him to learn to write; in which, the Teacher will find sufficient reason to exercise his vigilance, and to guard against the ill habits his charge will be apt to contract, both in posture and performance.

'Tis not my design, to describe at large what part of Grammar-learning is most necessary for this end, nor to trace out the methods by which it is to be effected; those must be left to the skill and discretion of his instructor: I shall, therefore, only recommend two things, not generally made use of.

I. If the scholar be enjoined to copy all his exercises, after correction, into a fair book, it will not only point out to him his mistakes, and inform him how to mend them; but will even insensibly improve his hand, and fix it in a bold and manly character.

II. As the principal end of instructing a youth, designed for business, in the Latin tongue, is to make him a greater master of his own; the way to apply, and render it most effectual to that end, is to use him frequently to English translations. The meaning and sense of his authors will thereby be impressed on his mind, with greater advantage, and in time, he will acquire a clear, just, and natural manner of expressing his thoughts, on all occasions; to which, if the reading of good authors in our own language be added, a due proficiency may be expected, not only in spelling and propriety of stile, but also in that elegance and good sense, which distinguish one man from another, and are absolutely requisite for all, that hope to be considerable in the world.

As the FRENCH TONGUE is, at present, the general language of Europe, and consequently most proper for correspondence, it ought to be recommended to the learner, among his Grammar studies, when his parts will admit of so great a variety; but not before he is sufficiently grounded in the Latin, from whence the French is chiefly derived.

WRITING must always be regarded as an essential part of every day's employment; because the free and clerk-like manner of writing, fit for the dextrous dispatch of business, is not attainable by speculative notions, or on a sudden, but by practice gradually, under the direction of an able master; nor can any other means be depended on, to make the hand easy, bold, and masterly.

ARITHMETIC now must be entered on; in teaching which art, the ensuing Treatise will be of some advantage: The bills of parcels, and those on book-debts, are such examples of computation, as daily occur in commerce, and which are of use to illustrate the practical rules, and apply them to business. The variety of promissory notes, acquittances, bills of exchange, with directions relating to them and things of like nature, are all intended to give the young clerk a taste and idea of the customs and usages of dealers, and to obviate the difficulties

The P R E F A C E.

faculties he would otherwise meet with, through his not being acquainted with things of that general concern in traffick.

TRANSCRIBING and computing the invoices and other mercantile precedents, will yield him a no less profitable exercise, and conduce, in some measure, to the understanding the practice of BOOK-KEEPING; a science so universally useful, that, without keeping regular accompts, the trader risques the sacrificing an improvable fortune, to negligence and chance; the man of estate is thereby made subject to frequent impositions, always to uncertainties; and the man in office is likewise exposed to numberless perplexities; and indeed, none can properly be said to be a judge of business, whose abilities, how considerable soever, are not assisted by some insight and skill therein.

THE collections of questions interspersed, all of them solvable by the rules of common Arithmetic, are subjoined, to exercise the pupil in numbers, to accustom him to calculation, and, with a design, to excite his curiosity, to look farther into their properties and use, not only as they regard themselves, but also as they respect lines, surfaces and solid bodies.

DRAWING is an attainment worth every man's pursuit; but it is indispensably necessary for the mechanic: Since, among its many other advantages, he is thereby able to convey his designs to the apprehensions of others, by a sketch off-hand, with much clearness and certainty.

GEOGRAPHY, as it informs us of the situation of the several parts of the earth, the distance and bearing of places, the extent, language, religion, and products of different countries; as it is the key to history and the publick news, and needful to the forming a right judgment of our country, its interest and concerns; is of too great importance to be neglected.

To these more necessary qualifications of the man of business, the practical parts of the Mathematics, as MEASURING, GAUGING, SURVEYING, NAVIGATION, are to be considered as very advantageous and useful additions: The more speculative parts, as GEOMETRY, ASTRONOMY, with EXPERIMENTAL and NATURAL PHILOSOPHY, and ALGEBRA, are also informations that give a sublime and noble turn of thought; and which, tho' they may not seem occurrences in immediate business or commerce, yet do they frequently conduce to the improvement of both, and are always amusements highly proper for the virtuous and intelligent mind.

I HAVE supposed the learner of a promising genius and teachable disposition; happy in parents able and willing to allow him an handsome and proper education; and happy in teachers, who want neither capacity nor integrity in their calling. Where all these do not concur, the misfortune is not easily retrieved. When once the time of youth is lost, the cares of life are so great and many, that few or none are ever able to recover themselves from the low condition always attending to the want of a proper and early education,

Soho-Square, Dec. 30,
1719.

M. CLARE

YOUTH'S INTRODUCTION

TO

Trade and Business, &c.



It is a common Thing with young People, even those who must be allow'd to understand the Principles of *Arithmetic* very well, to be often at a Loss, when but a simple Proposition is made them, a little out of the customary Form or common Road. In order to remedy this, it cannot be improper, in a Treatise of this Nature, here and there, at proper Stages, to intersperse little Exercises, partly in the way of Business, partly of Amusement and Information, to exemplify and apply what they more methodically learn. In doing whereof, 'twill not be amiss to set them down as it were promiscuously, that their Genius and Judgment may the better appear, in making a right Choice of the Rule and Method fit to produce the Solution of the Thing proposed.

RECREATION I.

I. WRITE down the Value of the following Numbers in Words at Length, viz. 370087. 418427900. 6210003745. 41027308751. 293417604712. 618002030694713.

Usually a less literal Number placed on the left Hand of a greater augments its Value; on the right, diminishes it.

The chief Roman Numbers are, I, I. V, 5. X, 10. L, 50. C, 100. D or I $\overline{5}$, 500. M or C $\overline{10}$, 1000. I $\overline{500}$, is 5000. I $\overline{5000}$, is 50000, &c. Tenfold when repeated: So CC $\overline{10}$, is 10,000.

A Line drawn over any Number less than a Thousand, intimates so many Thousands, as; L $\overline{70}$ X, is 70,000. C $\overline{100}$, is 100,000. and M $\overline{1}$, a Million.

II. Decypher the following Numbers, and find their Sum, IV. VI. IX. IIX. XIII. XLV. LXXXI. XCVI. CXC. CD. DCC. MCL. MDCXLVIII. M \overline{CC} M. I $\overline{500}$ I $\overline{500}$ CCCLVII. VI \overline{C} CLXXXX.

Answer, 1017297.

III. In

Contractions of Words, for the Dispatch of Business.

III. In Figures exprefs : A Million and half in *South-Sea Bonds*. Ninescore and fourteen Thousand, eight Hundred *Sheep*. Threescore and twelve Thousand, thirteen Hundred *Weight of Lead*. Fifteen Thousand and fourscore Million of *Styvers*. One Hundred and two Thousand, two Hundred and fix Million, seventy Thousand seven Hundred and seven *Ryals of Plate*. Three Million and thirty-three Thousand and thirty *Pieces of Eight*. Four thousand and forty Hundred Pounds thirty-four Shillings and fourteen Pence, five Farthings.

IV. For the Practice of Figure-making, in even Ranks, set down all the Numero's in the State-Lottery, as they rise successively, between 7500 exclusive, and 8000 inclusive ; and find their Sum.

Answer 3875250.

A TABLE of the Clerk-like Contractions of Words, for Dispatch of Business.

A. Answer.	Ass. Assigns.	Ch. Church.	Cr. Creditor.
A. B. Batchelor	Assessr. Assessor.	Chancr. Chancellor.	Cust. Custom.
of Arts.	Att. Attorney.	Chr. Christopher.	Curr. Current.
A. Bp. Archbishop.	Aug. Augustine.	Cit. City, Citizen, Citadel.	D. in Number 500.
Abr. Abraham.	B. D. Batchelor in Divinity.	Clem. Clement.	D. Duke, Dukedom, Duchy, or Dukes.
A. D. Anno Domini.	Barth. Bartholomew.	Cl. Clerk, Clergyman.	D. D. Doctor in Divinity.
Acc. Aecompt.	Bar. Baronet.	C. P. S. Keeper of the Privy-Seal.	d. a Peny.
Adm. Admiral.	Benj. Benjamin.	C. County.	Dan. Daniel.
Admr. Administrator.	Bp. Bishop.	Col. Colonel.	David.
Ag. Against.	Brit. Britain.	Collr. Collector.	Del. Delivered.
Alex. Alexander.	Bur. Burlace.	Comp. Company or Co.	Den. Denis.
a. m. before Noon.	Bush. Bushel.	Comm. Commissioners.	Dep. Deputy.
A. M. Master of Arts.	B. V. Blessed Virgin.	Const. Constable.	Devon. Devonshire.
A. M. in the Year of the World.	Bucks. Buckinghamshire.	Conts. Contents.	D. Ditto, the same.
Am. Amount.	C. in Number 100.	Corresp. Correspondent.	Dr. Debtor, Doctor.
Am. Amsterdam.	⊕. a Hundred Weight.	Counsell. Counsellor.	Dor. Dorothy.
And. Andrew.	Cap. Captain.	C. S. Keeper of the Seals.	Dorset. Dorsetshire.
Anth. Anthony.	Chap. Chapter.		Dy. Day.
Ar. Arthur.	Cha. Charles.		

E. Earl,

Contractions of Words, for the Dispatch of Business.

9

E. Earl, Evening or East.
E. A. P. Priest of the Church of England.
Edm. Edmund.
Edw. Edward.
e. g. for Example.
Elen. Eleanor.
Eliz. Elizabeth.
Esqr. Esquire.
Engd. England.
Excellt. Excellent.
Exa. Example.
Exo. Exchange.
Exr. Executor.
Exon. Exeter.
ft. the Ending, full.
Fr. Fort.
Fr. French.
Fra. France.
Factr. Factor.
Frd. Friend.
fd. the Ending, ford.
F. R. S. or R. S. S. Fellow of the Royal Society.
Fran. Francis or Frances.
Fred. Frederick.
Fre. Freight.
Gab. Gabriel.
Gar. Garrison.
Geo. George.
Gent. Gentleman.
Genl. General.
Genmo. Generalissimo.
Ger. Gerrard.
Gilb. Gilbert.
Govr. Governor.

Gr. Great.
Greg. Gregory.
Gr. Gross.
Han. Hannah.
Hants. Hampshire.
Hen. Henry.
Honbl. Honourable.
Hond. Honoured.
Honrs. Honours.
Holl. Holland.
Hum. Humphry.
I. in Number 1.
Jac. Jacob.
Ja. James.
Je. Jeoffry.
Jer. Jeremiah.
J. D. Doctor of Laws.
Insta. Instance.
Inst. Instant.
Imp. Imperial.
ibid. in the same place.
i. e. that is.
id. the same.
Instl. Instal.
Jno. John.
Jon. Jonathan.
Jos. Joseph.
Just. Justice.
Ingenr. Ingeneer.
Ke. King.
Kn. Knight.
Kath. Katherine.
L. Fifty in Number.
l. Book.
Lau. Laurence.
Ldy. Lady.
Leo. Leonard.

Lew. Lewis.
Ld. Lord.
L. S. the Place of the Seal.
LoP. Lordship.
LaiP. Ladyship.
Lieut. Lieutenant.
Lib. Liberty.
£. a Pound Sterling.
lb. a Pound Weight.
Lanca. Lancashire.
Lond. London.
Lyd. Lydia.
M. in Number 1000.
Ma. Mary.
M. Monsieur, Marquiss.
Madm. Madam.
M. A. Master of Arts.
Maty. Majesty.
Mar. Margaret, Martha, Marjery,
Mat. Matthew,
M. Martin.
M. D. Doctor of Physick.
Md. Memorandum.
Mr. Master.
Mrs. Mistress.
Math. Mathematicks.
Messrs. Masters.
Merch. Merchant.
Mich. Michael, Michaelmas.
Minr. Minister.
Midd. Middlesex.
Measr. Measure.
Mon. Month.
Mos. Moses.

Monfr. Monsieur.
Mss. Manuscripts.
M. S. Sacred to the Memory.
m. the Ending *ment.*
Nat. Nathanael.
Neh. Nehemiah.
Nic. Nicholas.
N. North.
N. B. Remark.
North. Northampton.
No. Number, Numero.
Nr. Neat, or Netto.
N. S. New Stile.
ob. Half-peny.
Obj. Object.
Obedt. Obedient.
Or. Our.
Ordr. Order.
O. S. Old Stile.
Oli. Oliver.
Omnip. Omnipotent.
Ow. Owen.
Oxon. Oxford.
pd. Paid.
per by.
per Cent. by the hundred.
Pat. Patrick.
Part. Partner.
Parlmt. Parliament.
Pet. Peter.
Philomath. a Lover of Learning.
Ph. Philip.
p. m. Afternoon.
Principl. Principal.
Proct. Proctor.

Contractions of Words, for the Dispatch of Business.

Prop. Proposition.
Pres. Present.
Q. Question.
q^r. Quart.
q^t. Quantity.
q^r. quarter or $\frac{1}{4}$ part.
Ra. Ralph.
Ran. Randal, Randolph.
Rich. Richard.
R. King or Queen.
R^t. Right.
Retⁿ. Return.
Rect^r. Rector.
Rev^d. Reverend.
Reg^t. Regiment.
Roy^l. Royal.
Rec^d. Received.
Reb. Rebecca.
Rem^r. Remainder.
Rec^r. Receiver.
Reg^r. Register.
Rob. Robert.
Rog. Roger.
Rol. Roland.
Rott^o. Rotterdam.
Salop. Shropshire.
Sar. Sarah.
S. South.

S^r. Sir.
S. or S^t. Saint.
std. the Ending *stead*.
sd. said.
Serg^t. Sergeant.
Sh. Shire.
s. a Shilling.
Serv^t. Servant.
Secr^y. Secretary.
Scot^{ld}. Scotland.
Sim. Simon.
Sol. Solution.
Sp^a. Spanish.
Spirit^l. Spiritual.
S. T. P. Doctor of Divinity.
Stephⁿ. Stephen.
Temp^l. Temporal.
Theo. Theophilus.
Tho. Thomas.
Tim. Timothy.
Tob. Tobias.
Tot. Total.
Treasy. Treasury.
Tr. Tare.
Tr^t. Tret.
V. in Number 5.
vⁿ. vain.

viz. that is to say.
v. see.
v^r. verse.
Val. Valentine.
Vin. Vincent.
Ven. Venerable.
Vic^r. Victualler.
Vic^r. Vicar.
wk. week.
Wal. Walter.
W. West.
Wardⁿ. Warden.
Westm^r. Westminster.
Wm. William.
Win. Winifred.
Wilts. Wiltshire.
w^t. weight or weighing.
w^t. what.
w^{ch}. which.
wth. with.
wⁿ. when.
Wor^l. Worshipful.
Wor^p. Worship.
wond^l. wonderful.
X. in Number 10.
X^t. Christ.
Xan. Christian.
Xtm^s. Christmas.

y^e. the.
yⁿ. then.
yo^r. your.
yo^rs. yours.
y^t. this.
y^t. that.
&^d. and.
&^c. and so forth.
Zach. Zachary.
Jan. January.
Feb. February.
Mar. March.
Apr. April.
May. May.
Jun. June.
Jul. July.
Aug. August.
Sept. } September.
7^{ber}. }
Oct. } October.
8^{ber}. }
Nov. } November.
9^{ber}. }
Dec. } December.
10^{ber}. }
X^{br}. }

RECRE-

RECREATION II.

A Person dying, left his Widow the Use of 5000 *l.* To a Charity he bequeathed 846 *l.* 10 *s.* To each of his three Nephews 1230 *l.* To each of his four Neices 1050 *l.* To twenty poor House-keepers five Guineas each, and 200 Guineas to his Executor : What must he have died possess'd of ?

Answer 14051 *l.* 10 *s.*

A Nobleman, going out of Town, is inform'd by his Steward, that his Corn-chandler's Bill comes to 123 *l.* 19 *s.* His Brewer's to 41 *l.* 10 *s.* His Butcher's to 212 *l.* 6 *d.* To his Lordship's Baker, is owing 24 *l.* To his Tallow-chandler, 13 *l.* 8 *s.* To his Taylor, 137 *l.* 9 *s.* 9 *d.* To his Draper, 74 *l.* 13 *s.* 6 *d.* His Coach-maker's Demand was 214 *l.* 16 *s.* 6 *d.* His Wine Merchant's, 68 *l.* 12 *s.* His Confectioner's, 16 *l.* 2 *s.* His Rent 82 Guineas. And his Servants Wages, for half a Year, came to 46 *l.* 5 *s.* What Money must he send to his Banker for, in case he would carry with him 50 *l.* to defray his Expences on the Road.

Answer 1108 *l.* 18 *s.* 3 *d.*

A Merchant buys up six Bags of *Canterbury* Hops, N^o 1. of which weigh'd, *Cwt.* 2. 2. 10. N^o 2. *Cwt.* 2. 1. 16. N^o 3. *Cwt.* 2. 0. 24. N^o 4. *Cwt.* 2. 3 only. N^o 5. *Cwt.* 2. 1. 12. N^o 6. *Cwt.* 2. 1. 16. besides a couple of Pockets, D^o that weigh'd *lb.* 58½ each : How many Hundred-weight has he to pay Carriage for, on bringing them to Town ?

Answer *Cwt.* 15. 2. 27.

A Corn-factor buys seventy Quarter of Oats, for 46 *l.* 7 *s.* 6 *d.* thirty eight Quarter of Beans, for 100 *l.* twelve Quarter of Peas, which cost 16 *l.* 16 *s.* eighty-eight Quarter of Barley, for 73 *l.* 8 *d.* sixteen *Ditto* of Wheat, for 56 *l.* 9 *s.* 10 *d.* and six Quarter of Rye, for 4 *l.* 1 *s.* 6 *d.* The Water Carriage of all comes to 13 *l.* 2 *s.* 7 *d.* his Riding Charges to 1 *l.* 13 *s.* and if he clears eighteen Guineas by the Bargain, what do his Bills of Parcels amount to ?

Answer 330 *l.* 9 *s.* 1 *d.*

The Collector of Cash has been out with Bills, and gives Account, that *A.* paid him 13 *l.* and half a Crown ; *B.* 2 *l.* 13 *s.* *C.* 14 *s.* and a Groat ; *D.* 1. 9 *s.* 8 *d.* ½. *E.* 11 *l.* 6 *d.* ¼. *F.* 17 *s.* and a Tetter ; *G.* 12 *s.* 2 *d.* *H.* a Pound and half a Guinea ; *I.* a Moidore and 13 *s.* *K.* two Broad-pieces of 23 *s.* each, a Jacobus of 25 *s.* and a Shilling ; *L.* nine Pound and a Mark ; *M.* 12 *l.* 12 *s.* *N.* a Bank Note of 15 *l.* and *O.* three Crown-pieces and an Angel : What Cash has he in Charge ?

Answer 76 *l.* 2 *s.* 6 *d.* ¼

In a Gentleman's Service of Plate, there are fourteen Dishes, weighing *oz.* 193. 13 *dwt.* Plates thirty-six, weighing *oz.* 421. 11 *dwt.* Four Dozen of Spoons, weighing *oz.* 104. 6 *dwt.* Six Salts chas'd, weighing *oz.* 32. Knives and Forks, weighing *oz.* 83. 9 *dwt.* Four Presenters, weighing *oz.* 113. 4 *dwt.* In Mugs, Tumblers, Beakers, and other odd Pieces, weight *oz.* 264. 18 *dwt.* A Silver Tea-Kettle and Lamp, weighing *oz.* 126. 9 *dwt.* and the rest of that Equipage, *oz.* 93. 2 *dwt.* What Quantity of Plate had the Butler under his Care.

Answer *oz.* 1432. 12 *dwt.*

DIRECTIONS for SUPERSCRPTIONS.

A Horse in his Furniture is worth 35 *l.* 10 *s.* out of it 12 *l.* 12 *s.* How much does the Price of the Furniture exceed that of the Horse?

Answer 10 *l.* 6 *s.*

A. of *Amsterdam*, is Debtor to *B.* of *Bristol*. For Mercery Wares as *dp* Factory, 418 *l.* 2 *s.* 6 *d.* For forty Cwt. of *Cheshire-Cheese*, 52 *l.* 18 *s.* For *English* Broad-Cloth, fifteen Pieces, 317 *l.* 12 *s.* 10 *d.* For nineteen Fodder of Lead, 320 *l.* For twelve Tons of Bar-Iron, 173 *l.* 3 *d.* For eight Tons of Copper, 1110 *l.* 10 *s.* 1 *d.* For his Acceptance of a Bill drawn, 88 *l.* 14 *s.* For another paid for Honour 50 *l.* Ten Dozen *Morocco-Skins*, 28 *l.* 15 *s.* 4 *d.* Paid Convoys, Insurances, and Port-charges, 43 *l.* Ware-house Room, Postage, Sledage, Boatage, and incidental Charges, 5 *l.* 5 *s.* The Factorage of all came to 112 *l.* 6 *s.* For what Sum must *B.* draw to clear the Accompt?

Answer 2720 *l.* 4 *s.*

Having a Piece of Ground, 127 Foot in Front, let off to *A.* 57 Foot to build on at one End, and to *B.* at first 27 Foot and $\frac{1}{2}$ from the other, which he afterward by Consent extended to 42 Foot; what Ground was left me in the Centre?

Answer 28 Foot.

How much is *A.* (born sixteen Years ago) elder than *B.* who will come into the World fourteen Years hence?

Answer 30 Years.

HAVING observed the Mistakes young Persons are liable to, for want of an Opportunity of informing themselves of the Stile and Titles due to Persons in Office, and those of elevated Rank and Fortune, it cannot be improper, in this Place, to shew the proper Directions and Address from Inferiors to Persons of Distinction, the Chief of which being known, the rest will be attained without much Difficulty.

*** Note, *The Terms of Address are put in a different Character.*

To the Royal Family.

TO the King's most Excellent Majesty. *Sire*, or *May it please Your Majesty.*

To his Royal Highness, *Frederick* Prince of *Wales*. *May it please Your Royal Highness.*

And in like manner to any other of the Royal Family, changing what is to be changed.

To the Nobility.

TO His Grace *L.** Duke of *D.** *My Lord Duke, Your Grace.*

To the most Noble *P.* Lord Marquiss of *C.* *My Lord Marquiss, Your Lordship.*

* *The Learner is to substitute real Names and Titles in the Place of these initial Letters all through.*

To

DIRECTIONS for SUPERSCRPTIONS.

13

To the Right Honourable J. Earl of B. *My Lord, Your Lordship.*

To the Right Honourable G. Lord Viscount T. *My Lord, Your Lordship.*

To the Right Honourable T. Lord O. *My Lord, Your Lordship.*

The Wives of Noblemen are address'd in Terms equal to their Husband's Rank.

The Title of *Lord* and *Right Honourable* is given, by Courtesy, to all the Sons of *Dukes* and *Marquisses*, and to the eldest Sons of *Earls*; and the Title of *Lady* to all their Daughters: The younger Sons of *Earls* are all *Honourable* and *Esquires*.

The Sons of *Viscounts* and *Barons* are stiled *Esquires* and *Honourable*, and their Daughters are directed to, as the *Honourable* Mrs. N. N. but without other Stile; they have however Rank among the first Gentry without Title.

The King's Commission confers the Title of *Honourable* on any Gentleman in a Place of Honour or Trust.

The Stile of *Right Honourable* is due to no Commoner, but such as are Members of His Majesty's most Honourable Privy-Council; except the three Lord Mayors, of *London*, *York*, and *Dublin*, and the Lord Provost of *Edinburgh*, during Office.

Every considerable Servant to the King, upon the Civil or Military List, or to any of the Royal Family, is stiled *Esquire*, *pro tempore*.

P. C. in the Margin denotes a Privy-Counsellor, and therefore Rt. Honourable

To the Parliament.

TO the Right Honourable the Lords Spiritual and Temporal, in Parliament of *Great-Britain*, assembled.
My Lords; May it please Your Lordships.

To the Honourable the Knights, Citizens and Burgeesses, in Parliament of *Great-Britain*, assembled. *Gentlemen, May it please Your Honours.*

P. C. To the Right Honourable Sir G. H. Speaker of the Honourable House of Commons, *Sir.*

To the Clergy.

TO the most Reverend Father in God W. Lord Archbishop of C. *My Lord, Your Grace.*

To the Right Reverend Father in God E. Lord Bishop of L. *My Lord, Your Lordship.*

To the Right Reverend the Lord Bishop of G. Lord Almoner to His Majesty.

T.

DIRECTIONS for SUPERSCRPTIONS.

To the Rev. Mr. or Dr. (according to their Degree) *A. B.* Dean of *C.** — Chancellor of *D.** — Archdeacon of *E.* — Prebendary of *F.* — Rector of *G.* — Vicar of *H.* — Curate of *J.* —

The proper Address to these last Gentlemen is in general only, Sir. Deans and Archdeacons are called Mr. Dean, and Mr. Archdeacon.

To the Officers of His Majesty's Household.

They are generally Addressed to according to their Rank and Quality, but sometimes according to their Office; as *My Lord Steward, My Lord Chamberlain, Mr. Comptroller, Mr. Vice-Chamberlain.*

In Superscriptions of Letters, that relate to Gentlemen's Employments, their Stile of Office ought never to be omitted.

To the Commissioners and other Officers on the Civil List.

TO the Right Honourable *R.* Earl of *W.* — *Lord Privy-Seal. — Lord President of the Council. — Lord Great Chamberlain. — Earl Marshal of *England.* — One of his Majesty's Principal Secretaries of State, &c.

To the Right Honourable the Lords Commissioners. — *Of the Treasury. — Of Trade and Plantations. — Of the Admiralty, &c.

Note, If there be a Nobleman or even a Commoner, who is a Privy-Counsellor, among any Set of Commissioners, it will be proper to stile them collectively, Right Honourable. The usual Address then is; Your Lordships.

To the Honourable the Commissioners of — *His Majesty's Customs. — Revenue of Excise. — Duty on Salt, For his Majesty's Stamp-Duties. — For Victualling his Majesty's Navy, &c.

* *These Blanks are also to be filled up as before, with Names and Dignities, and made so many distinct Directions, repeating always the general Stile preceding the Blank.*

RECRE-

To the Soldiery.

TO the Honourable *A. B. Esq;* Lieutenant General.—Major General.—Brigadier General of His Majesty's Forces. *Sir; Your Honour.*

To the Right Honourable *J. Earl of S.* Captain of His Majesty's—First Troop of Horse Guards.—Band of Gentlemen Pensioners.—Band of Yeomen of the Guard, &c.

To the Honourable Colonel *Thomas Pitt.* To Major *Foubert.* To Captain *Audley, &c.* *Sir.*

To the Principal Officers of His Majesty's Ordnance. *Your Honours.*

To *A. B. Esq;* Lieutenant General.—Surveyor General of the Ordnance, &c.

To the Officers of the Navy.

TO His Grace *C. Duke of D.* Lord High-Admiral of *Great Britain.* *Your Grace.*

To the Right Honourable *G. Lord Viscount T.* Vice, or Rear Admiral of *Great Britain.*

To the Honourable *Sir P. Q.* Admiral of the *Blue.*—Vice Admiral of the *Red.*—Rear Admiral of the *White.* *Sir; Your Honour.*

To Captain *R. L.* Commander of his Majesty's Ship the *Shoreham,* riding at *Spithead.*

R E C R E A T I O N III.

A Trader failing, was indebted to *A. 71 l. 12 s. 6 d.* To *B. 34 l. 9 s. 9 d.* To *C. 16 l. 8 s. 8 d.* To *D. 44 l.* To *E. 66 l. 7 s. 6 d.* To *F. 11 l. 2 s. 3 d.* To *G. 19 l. 19 s.* And to *H.* a Fine of thirty Marks. At the time of this Disaster, he had by him in Cash, *3 l. 13 s. 6 d.* in Commodities, *23 l. 10 s.* in Household Furniture, *13 l. 8 s. 6 d.* in Plate, *7 l. 18 s. 5 d.* in a Tenement, *56 l. 15 s.* in recoverable Book-Debts, *87 l. 13 s. 10 d.* Supposing these Things faithfully surrender'd to his Creditors, what will they then lose by him?

Answ. 91 l. 5 d.

In the City of *Pekin* in *China,* is a Bell weighing, 'tis said, 120000 Pounds, at *Nankin,* in the same Country, is another weighing 50000 Pounds. The first exceeds the great Bell at *Erfurd,* in *Upper Saxony,* by 94600 Pounds: How much then is the *German* Bell inferior in Weight to the Second?

Answ. Near one half.

A Robbery being committed on the Highway, there was assessed on a certain Hundred, in the County of S. the Sum of 373 *l.* 14 *s.* 8 *d.* of which the four Parishes paid 37 *l.* 16 *s.* 4 *d.* apiece, the four Hamlets 28 *l.* 3 *s.* 10 *d.* each, the four Townships 19 *l.* 19 *s.* each; what was the Deficiency? *Answ.* 30 *l.*

Received in lieu of two Gold Repeaters, sent to *Jamaica*, in 1730. the five Chests of *Indigo* following; and on a like Adventure, in 1732. the subsequent five Chests: The Question is, how much *Indigo* I had less the second Time than the first?

Anno 1730.	Cwt.	qr.	lb.	lb.	Anno 1732.	Cwt.	qr.	lb.	lb.	
N ^o . 1.	2	—	1	— 16	Tare—43.	N ^o . 1.	1	—	3 — 07	Tare—32.
2.	2	—	2	— 11	—47.	2.	1	—	3 — 17	—32.
3.	2	—	0	— 12	—41.	3.	1	—	2 — 10	—30.
4.	2	—	0	— 19	—42.	4.	1	—	0 — 13	—27.
5.	2	—	3	— 17	—49.	5.	2	—	0 — 11	—34.
					Answ. lb. 342.					

A. made a Bond for 114 *l.* 10 *s.* the Interest came to 19 *l.* he then paid off forty Guineas, and gave a fresh Bond for what was behind. By the Time there was 13 *l.* 4 *s.* 8 *d.* due on the second, for Interest, he paid off 37 *l.* 14 *s.* 2 *d.* more, took up the old Bond, and signed a new one still for the Residue. The Principal again ran on till there was 9 *l.* 11 *s.* 3 *d.* more due, and then he determined to take it up. Pray what Money had his Creditor to receive? *Answ.* 76 *l.* 11 *s.* 9 *d.*

Received from my Factor, at *Alicant*, an Account of Sales of Tin, to the Value of 197 *l.* 12 *s.* *Sterling*; of Bee's Wax, to 71 *l.* 7 *s.* 6 *d.* of Stockings, to 47 *l.* 3 *s.* 6 *d.* of Tobacco, the Net proceeds whereof were 943 *l.* 15 *s.* 10 *d.* of Cotton, 123 *l.* 3 *s.* 7 *d.* and of Wheat, to the Amount of 116 *l.* 5 *s.* 6 *d.* he at the same time advises that he has, ~~off~~ Order, shipped, for my Account and Risk, *Alicant* Wines, to the Value of 226 *l.* 16 *s.* 6 *d.* Figs, of 157 *l.* 11 *s.* 3 *d.* Fruit, ninety Chests, cost 104 *l.* 6 *s.* Olives, 136 *l.* 10 *s.* Oil, 193 *l.* 17 *s.* Raisins, 143 *l.* 4 *d.* and *Spanish* Wool, to the Value of 73 *l.* 13 *s.* 8 *d.* the Commission of the whole Consignment came to 71 *l.* 18 *s.* 11 *d.* The Question is, which of us is to draw for the Difference, and how much? *Answ.* 391 *l.* 14 *s.* 3 *d.* is to be remitted by him.

A. *B.* and *C.* open an Account with a Banker, *Jan.* 11. 1739. and put into his Hands, *viz.* *A.* 17 *l.* 17 *s.* *B.* 34 *l.* 11 *s.* 6 *d.* *C.* 28 *l.* 18 *s.* 10 *d.* On the 21st *A.* withdrew 9 *l.* 10 *s.* and *C.* advanced 12 *l.* and a Crown. The 24th *B.* called for 6 *l.* 10 *s.* The 30th *C.* wanted 19 *l.* 8 *s.* 4 *d.* On the 12th of *Feb.* *B.* deposited with him eleven Broad Pieces and three Moidores. On the 19th *A.* sent for 5 *l.* and a Noble more; but on the 24th, returned him 4 *l.* On the 2^d of *March*, *C.* paid in twenty Guineas, and *B.* drew for six. The 14th *B.* sent in 7 *l.* 8 *s.* 8 *d.* and the 17th *A.* had back, 12 *l.* 2 *s.* 6 *d.* On the 19th, they sent for five Guineas a Man, and on the 22nd *A.* advanced that Sum, and ten Marks a-piece more: How much did their said Banker owe them jointly and separately *Day-Day*? *Answ.* to *A.* 39 *l.* 11 *s.* 2 *d.* *B.* 62 *l.* 11 *s.* 6 *d.* *C.* 49 *l.* 8 *s.* 10 *d.*

DIRECTIONS for SUPERSCRPTIONS.

17

W. X. Y. Z. send in their Money to the Bank, and draw upon it in the following Manner, viz. *June 4. 1740.* *Z.* sent in 70 *l.* 8 *s.* *Y.* had 116 *l.* 14 *s.* 10 *d.* remaining on Balance, and the 14th sent in 120 *l.* more. *W.* paid in 47 *l.* 18 *s.* 2 *d.* in Cash, and deliver'd a Bank Note for 200 *l.* *X.* paid in a Bill of Exchange, on a good Man, for 33 *l.* 14 *s.* 9 *d.* and in Cash, made it up 100 *l.* *Y.* on the 16th drew for 43 *l.* 12 *s.* 6 *d.* and on the 20th *Z.* for eleven Guineas. *W.* on the 24th added 14 *l.* 12 *s.* 10 *d.* and *X.* withdrew 47 *l.* 10 *s.* 8 *d.* *Y.* on the 28th paid in 18 *l.* 5 *s.* and two Days after drew for 88 *l.* 13 *s.* 4 *d.* *W.* sent for sixty three Guineas on the 30th, and in five Days after for 15 *l.* 10 *s.* 9 *d.* more. *Z.* on the 7th of *July*, demanded 12 *l.* 8 *s.* 3 *d.* and *X.* 7 *l.* 3 *s.* 1 *d.* *Z.* on the 15th remitted them, 31 *l.* 12 *s.* 4 *d.* and £ Assignment, they received for him at the same time double that Sum. *Y.* required 81 *l.* 19 *s.* 8 *d.* on the 12th, and *W.* 10 *l.* 10 *s.* *Y.* three Days after that sent in 42 *l.* and *W.* 52 *l.* On the 19th *X.* sent for 31 *l.* 18 *s.* 10 *d.* and the 24th paid in 19 *l.* 19 *s.* The Question is how stood these Gentlemen's Cash severally, and what Money can they jointly raise?

Answer W. 222 *l.* 7 *s.* 3 *d.* *X.* 33 *l.* 6 *s.* 5 *d.* *Y.* 82 *l.* 14 *s.* 4 *d.* *Z.* 141 *l.* 5 *s.* 9 *d.*

A Merchant at his Out-setting in Trade owed 280 *l.* He had in Cash, Commodities, and good Debts 11505 *l.* 10 *s.* He clear'd the first Year by Commerce 393 *l.* 13 *s.* 1 *d.* What at the Year's End was his neat Balance?

Answer 11619 *l.* 3 *s.* 1 *d.*

The SUPERSCRPTIONS and Terms of ADDRESS continu'd.

To the Ambassadry.

TO His Excellency Sir *A. B.* Bart. His *Britannick* Majesty's Envoy Extraordinary, and Plenipotentiary to the *Ottoman Porte.* *Your Excellency.*

To His Excellency *C. D.* Esq; Ambassador to His most Christian Majesty. *Your Excellency.*

To His Excellency the Baron de *E.* His *Prussian* Majesty's Resident, at the Court of *Great-Britain.* *Your Excellency.*

To Seignior *F. G.* Secretary from the Republick of *Venice*, at *London.* *Sir.*

To Seignior *H. Y.* Secretary from the Great Duke of *Tuscany*, at *London.*

To *K. L.* Esq; His *Britannick* Majesty's Consul, at *Smyrna.*

C

To

To the Judges and Lawyers.

TO the Right Honourable *M.* Baron of *N.* Lord High-Chancellor of *Great-Britain.* *My Lord, Your Lordship.*

P. C. To the Right Honourable Sir *O. P.* Master of the Rolls. *Sir, Your Honour.*

P. C. To the Right Honourable Sir *R. S.* Lord Chief Justice of the King's Bench—Of the Common-Pleas. *My Lord, Your Lordship.*

To the Honourable Sir *W. W.* Lord Chief Baron of the Exchequer.

To the Honourable *G. S.* Esq; one of the Justices of the Court of Common-Pleas. Or, to Judge *S.* *Sir.*
Or, *May it please you, Sir.*

To Sir *S. M.* His Majesty's Attorney—Solicitor—Advocate-General. *Sir.*

To *Y. Z.* Esq; Serjeant—Barrister, or, Counsellor at Law. *Sir.*

To Mr. *Edward Bustle,* Attorney at Law. *Sir.*

* * N. B. Upon the Circuits and when they sit singly, every one of the Judges are addressed to and treated with the same Respect and Ceremony as the chief Justices.

To the Lieutenancy and Magistracy.

TO the Right Honourable *S.* Earl of *B.* Lord Lieutenant, and *Custos Rotulorum* of the County of *H.*

To *P. E.* Esq; High Sheriff for the County of *C.* *Mr. High Sheriff; Sir.*

To the Right Honourable Sir *A. B.* Knight, Lord-Mayor of the City of *London.* *My Lord, Your Lordship.*

To the Right Worshipful *C. D.* Esq; Alderman of *Tower Ward, London.*

To the Right Worshipful Sir *E. F.* Recorder of the City of *London.*

To the Worshipful *G. H.* Esq; Mayor of *C.* *Sir, Your Worship.*

To the Worshipful *J. K.* Esq; one of his Majesty's Justices of the Peace for the County of *S.* *Your Worship.*

To *L. M.* Esq; Deputy Steward of the City and Liberty of *W.* *Mr. Deputy; Sir.*

To the Governors under the Crown, &c.

TO His Excellency *J.* Lord *C.* Lord Lieutenant of the Kingdom of *Ireland.* *Your Excellency.*

To their Excellencies the Lords Justices of the Kingdom of *Ireland.* *Your Excellencies.*

To the Right Honourable *J.* Earl of *L.* Governor of *Dever-Castle,* and Lord-Warden of the *Cinque-Ports.*
My Lord, Your Lordship.

To

DIRECTIONS *for* SUPERSCRPTIONS.

19

To the Right Honourable C. Lord Viscount D. Constable of the *Tower*.

To His Excellency J. H. Esq; Captain General and Governor in Chief of the *Leeward Caribbee Islands, America. Your Excellency.*

To the Honourable F. N. Esq; Lieutenant-Governor of *South Carolina.*

To the Honourable Sir J. G. Deputy-Governor of *Portsmouth.*

To the Honourable G. P. Esq; Governor of Fort St. George, *Maderas, in East-India.*

To the Worshipful the President, and Governors of *Christ's Hospital, London.*

The Second Governors of Colonies appointed by the King, are stiled Lieutenant-Governors: Those appointed by Proprietors, as the East-India Company, &c. are called Deputy-Governors.

To Incorporate Bodies.

TO the Honourable the Court of Directors of the United Company of Merchants of *England, Trading to the East-Indies.*

To the Honourable the Sub-Governor, Deputy-Governor, and Directors of the *South-Sea Company.*

To the Honourable the Governor, Deputy-Governor, and Directors of the Bank of *England.*

To the Master and Wardens of the Worshipful Company of *Drapers.*

To the Gentry.

TO the Honourable Sir C. W. Bart. at B. near L.

To the Honourable Sir W. S. Knight, at G. in *Suffolk.*

To R. Y. Esq; at M. in *Cheshire:* Or to Mr. Y. &c.

* * *The Wives of Knights and Baronets, are called Lady W. or Lady S. But the Wives of Esquires, and other Gentlewomen, only Mistresses, &c.*

To Men of Trade and Professions.

TO Mr. G. F. Merchant in *Austin-Fryars, London.*

To Dr. R. M. in *Bloomsbury-Square, London.*

To Mr. D. S. Surgeon, in *Covent-Garden, London.*

To Mr. X. Y. Pewterer in *Friday-street, London.*

To Mr. J. D. Writing-Master, at *Rotherhitb, near London.*

* * *It will be proper to mention the Designations of the Abodes of less eminent Traders, as well as their Professions.*

To the Honourable Court of Directors of the United Company of Merchants of *England*, trading to the *East-Indies*.*The Humble Petition of* HAMPDEN HARDY

SH EW E T H,

That your Petitioner, having been bred to Writing and Merchants-Accompts, humbly presumes himself qualify'd to serve your Honours in the *East-Indies*.

Your Petitioner therefore humbly prays, Your Honours will please to entertain him as a Writer, for one of your Factories in *India*, wherein he will demean himself with the utmost Diligence, and Faithfulness, and give such Security as your Honours shall require.

And your Petitioner shall ever pray, &c.

RECREATION IV.

A Chaise, Horse, and Harness, were together valued at 50 *l.* the Horse in Harness was worth 38 *l.* 16 *s.* 6 *d.* the Chaise and Harness were estimated at 13 *l.* 13 *s.* Their several Valuations are required?

Answer, Harness 2 l. 9 s. 6 d.

Supposing that for a Quarter's Rent I paid in Money 7 *l.* 7 *s.* 6 *d.* and was allowed for a small Repair 18 *s.* 9 *d.* and for the King's Tax 8 *s.* 9 *d.* What did my Tenement go at a Year?

Answer 35 l.

R E C R E A T I O N.

21

Seth was born when *Adam* was 130 Years of Age, and 800 Years before our said Grandfire's Death: *Seth*, at the Age of 105 Years, had *Enos*: He, at 90, was Father to *Cainan*, who, at 70, had *Mabalateel*: This Man, at 65, got *Jared*, who, having lived 162 Years, was Father to *Enoch*: This Patriarch, at 65 Years of Age, had *Methuselah*; and by the Time he was 187 Years of Age, his Son *Lamech* came into the World, who, at 182 Years old, was Father to *Noah*; and when *Noah* was 600 Years old, the Flood swept away the Bulk of Mankind. In what Year of the World did this happen, and how long after the Death of *Adam*?

Answer 726 Years after *Adam's* Decease.

From the Creation to the Flood was 1656 Years; thence to the Building of *Solomon's* Temple 1336 Years; thence to *Mahomet*, who lived 622 Years after Christ 1630 Years: In what Year of the World was Christ then born?

Answer Anno 4000.

When the Air presses with its full Weight, in very fair Weather, it may be demonstrated, that there press upon a human Body about 33905 Pounds of that fluid Matter; and in very foul Weather, when the Air is most light, but 30624 Pounds. What Difference of Weight lies on such a Body, in the two greatest Alterations of the Weather?

Answer 3281 Pounds *Avoirdupoiz*.

If the mean Distances between the Earth and Sun be 81 Millions of Miles, and between the Earth and Moon 240 Thousands: How far are these two Luminaries asunder in an Eclipse of the Sun, when the Moon is lineally between the Earth and Sun; and in another of the Moon, when the Earth is in a Line between Her and Him?

Answer Of the Sun 80760000 Miles; the Moon 81240000.

Hipparchus and *Archimedes* of *Syracuse*, about 200 Years before Christ; *Possidonius* 50 Years before the said grand Period; and *Ptolomy* 140 Years after it, all advanced the Science of Astronomy. How long did each of these Persons flourish before the Year of Christ 1740?

Answer *Possidonius* 1790. *Ptolomy* 1600 Years.

What Difference is there between the Ages of *A.* born in the Year 1693, and *B.* that will be born 13 Years hence: The Question being put Anno 1740?

Answer 60 Years.

A Grant was made by the Crown, Anno 1239, which was forfeited 137 Years before the Revolution in 1688: How long did the same subsist?

Answer 312 Years.

Moses was born Anno Mundi, 2433; *Homer* 832 Years after him; *Julius Cæsar* lived 40 Years before our Saviour, and *Alexander* 312 Years before *Cæsar*: Now as Christ was incarnate 4000 Years after the Creation, the Sum of the Intervals between *Homer* and the other three great Personages, is required?

Answer 1813 Years.

The Semi-diameter of the *Earth's* Orbit, or annual Path round the Sun, in the Centre of the System, is about 81,000,000 of Miles; that of *Venus*, 59,000,000; when they are both on the same Side the Sun, they are in *Perigæo*; when on different Sides, in *Apogæo*: What is the Difference of their Distances in both these Circumstances?

Answer 118 Mill. of Miles.

A. was

130
115
90
70
65
162
65
107
102
600
1656
930
726

Various Forms of Acquittances.

A. was born when *B.* was 18 Years of Age : How old shall *A.* be when *B.* is 41 : And what will be the Age of *B.* when *A.* is 72 ?
Answer *A.* 23. *B.* 90.

Various Forms of Acquittances, when an Apprenticé or Servant receives Money for the Use of his Master, or Employer, &c.

Receiv'd the 13th of *May*, 1740. of *Mr. Adam Brown*, nine Pounds, twelve Shillings, for my Master *Daniel Cole*, on Accompt,

9 l. 12 s.

⌘ *Timothy Telmony.*

Receiv'd the 24th of *June*, 1740. of *Clement Dandridge*, forty-five Pounds, eight Shillings, Six-pence, in full for my Master *Edward Ford*,

45 l. 8 s. 6 d.

⌘ *George Harmless.*

Receiv'd the _____ of _____ of *Mr. Philip Quiney* and Company, one hundred Pounds for *Mr. Jonathan Fosling* and Partners,

100 l.

⌘ *Richard Smithers.*

Receiv'd the _____ of _____ 1740. of the Honourable *East-India* Company, by the Hands of *Richard Blount*, Esq; two thousand Pounds, ten Shillings, for *Mr. Durant* and Company,

2000 l. 10 s.

By *Titus Valuable.*

Receiv'd the _____ of the Governor and Company of the Bank of *England*, seven thousand forty-one Pounds, eleven Shillings, for *Mr. William Zeuxy* and Company,

7041 l. 11 s.

⌘ *Young Zantby.*

* * * *Date each Transaction in Business, according to the precise Time when it happen'd.*

Various Forms of Acquittances.

23

Receiv'd of the Worshipful Company of *Mercers*, by the Hands of Mr. *George Clerk*, ninety-two Pounds, for my Father *Edward Yates*.

92 l.

¶ *James Yates*.

Receiv'd of the Right Honourable Sir *John Eyles*, Baronet, and Lord-Mayor of *London*, thirty Pounds, for the Use of the *Artillery Company, London*.

30 l.

¶ *John Blackwell, Clerk*.

Receiv'd Nov. 17, 1740. of Mr. *Edward Froward*, ten Pounds for a Quarter's Rent, due at *Michaelmas* last, for my Master *Geo. Trustnone*.

10 l.

¶ *Clem. Dealwell*.

Receiv'd the of of Mr. *Lawrence Shifter*, twenty-nine Pounds six Shillings, in Part of a Bill of ninety Pounds, due the third Instant to Mr. *Simon Dealwell*.

29 l. 6 s.

¶ *Phineas Quiet*.

Receiv'd of Mr. *Andrew Allpaid*, by Order, and on Account of Mr. *Humphry Hoardmoney*, one hundred Pounds for Mr. *John Graham*, and Company, this 14th of *March* 1740.

100 l.

¶ *Thomas Trusty*.

Receiv'd the of of Mr. *Benj. Banker*, by Order of Mr. *Nich. Factor*, the Sum of one hundred Pounds six Shillings Eight-pence, on Account of Mr. *Thomas Trustall* of *Colchester*. I say received for my Master *Edm. Goodman* and Partner,

100 l. 6 s. 8 d.

By *Jonas Diligent*.

Receiv'd of Capt. *Thomas Sawery*, and Proprietors, in the Engine for Raising Water by Fire, four hundred forty eight Pounds, for three Tons of Copper, at 16 d. a Pound, for Mr. *Thomas Bosville*, and Company, this of

448 l.

¶ *John Wilkes*.

Various Forms of Acquittances.

Receiv'd this 22d of *October*, 1740. of *P. D. Esq*; the Sum of ninety-four Pounds in Cash, and an Assignment on Mess. *R. S.* and *S. T.* for one hundred Pounds more, which, when discharged, will be in full for Mess. *T. B.* and *S. N.*

£ Cash 94 *l.*

£ Assign. 100 *l.*

In all — 194 *l.*

£ *Jonas Competent.*

Various Forms of Acquittances, upon Receipt of Money, by Masters and Men of Business themselves.

Receiv'd the 29th of *July* 1740. of Mess. *Samuel* and *Simon Surepay*, five hundred and forty Pounds, on Account,

540 *l.*

£ *William Percival.*

Received the _____ of _____ of the Right Honourable *Arthur Onslow*, Esq; the Sum of two hundred and fifty Pounds, in full of all Demands, for Self and Company,

250 *l.*

£ *Josiah Milner.*

Received the _____ of _____ of Mr. *Clerk Powel*, the Sum of ten Pounds, ten Shillings, in Part of my growing Sallary and Substinance,

10 *l.* 10 *s.*

£ *Hamilton Horsfeman.*

Received the _____ of _____ of Mr. *Charles Torriano*, twenty five Pounds, in full for the Difference of two thousand five hundred Pounds, Bank Stock,

25 *l.*

£ *Jacob Farmer.*

Received

Various Forms of Acquittances.

25

Received the 19th of *June*, 1740. of Mr. *James Shaw*, thirty Pounds in full for six Months Interest of twelve hundred Pounds, due at *Lady-Day* last,

30 l.

☞ *Gabriel Growth.*

Received the _____ of _____ 174 _____ by the Order, and for the Use of Mr. *Henry Marr*, of Mr. *Stephen Stone*, eight Pounds ten Shillings, and allow'd for Taxes and Repairs one Pound ten, together the Sum of ten Pounds, in full for a Quarter's Rent, due at *Michaelmas* last,

10 l.

☞ *Randal Rentgather.*

Received _____ 174 _____ of Mr. *Lewis Landlove*, twenty five Pounds, in full for half a Year's Rent, due at *Xtmas* last, out of which, deducted for Taxes five Pounds, and for Repairs two Pounds. I say receiv'd for, and by Order of *Robert Richer*, Esq;

25 l.

☞ *Christopher Countwell.*

Receiv'd _____ 174 _____ by the Hands of Mr. *Peter Prentice*, by Order of *Chamberlain Trustee*, Esq; thirteen pounds seven Shillings in Money, allow'd for Taxes thirty three Shillings, in all fifteen Pounds, being for half a Year's Rent, due at *Lady-Day* last from Capt. *Richard Roundears*,

15 l.

☞ *Martin Moore.*

Receiv'd _____ 174 _____ of the Executors of *Charles*, late Earl of *Glendore*, by the Hands of Mr. *Isaac Cavendish*, the Sum of seventy five Pounds, in full of my half Year's Annuity, due at *Lady-Day* last,

75 l.

☞ *Ann Bridgeman.*

Receiv'd _____ 174 _____ of the Right Reverend *Edward*, Lord Bishop of *Durham*, by the Hands of Mr. *Stephen Rainer*, the Sum of ninety Pounds, and is in full for three Quarterly Payments of my Annuity, due at *Michaelmas*, *Christmas*, and *Lady-Day* last,

90 l.

☞ *Charlot Crusty.*

R E C R E A T I O N.

Receiv'd of Mr. *A. B.* the Sum of ten Pounds in Money, and a Note of his Hand, bearing equal Date with this, for fourteen Pounds more ; which Note, when paid, will be in full of all Demands to this Day of 174

☞ Charles Cautious.

Receiv'd 174 of Robert Ayleff, Esq; and Owners of the Prince Frederick, the Sum of seventy three Pounds ten, in full for Cordage, Tackle and Trimming furnished the said Ship;

73 l. 10 s.

☞ Samuel Cluely.

R E C R E A T I O N V.

IN a Company *S.* had 3 l. 17 s. 2 d. more than *T.* who had six Guineas less than *R.* who had within 16 s. 8 d. as much as *W.* who was known to have 100 Guineas wanting ten Marks of 13 s. 4 d. each. Pray what Money had they among them?

Answer 382 l. 1 s. 10 d.

The Building of Solomon's Temple was in the Year of the World 3000 ; Troy was, by Computation, built 443 Years before the Temple, and 260 before London : Now Carthage was built 113 Years before Rome, founded 744 Years before Christ, born Anno Mundi 4000 ; is London or Carthage the the ancients City, and how much ?

Answer London by 326 Years.

You were born 34 Years after me ; how old shall I be when you are 17 ; and how old will you be when I am 70 Years of Age ?

Answer, I 51, You 53.

A. is 17, *B.* 7, what will their Ages severally be when the elder is double the Age of the Younger ?

Answer, *A.* 20. *B.* 10.

Five notable Discoveries were made in 215 Years Time, viz. 1. The Invention of the Compass. 2. Gun-Powder. 3. Printing. 4. The Discovery of America. 5. Truth, in the Reformation. The last was brought about Anno 1517 : The Third 77 Years before : The second 42 Years after the first, and the fourth 148 Years after the second. The Question is, in what Year of Christ did each of these happen to be found ?

Ans. Compass, Anno 1302. Fire-Arms, 1344. Printing, 1440. America, 1492.

Three and thirty Years before the Restoration in 1660, the Crown granted Demesnes, to certain Uses, for 210 Years then to come. The Proprietor in 1715, procur'd a reversionary Grant for 99 Years, to commence after the Expiration of the first : In what Year of Christ will the second Term end ?

†

Answer, Anno 1936.

PROMISSORY NOTES.

27

A publick Edifice was finished toward the Close of the tenth of King *John*, who began his Reign 134 Years after the Conquest, in 1066; and it stood till within 70 Years of the Peace of *Utrecht*, in 1713: Of what Duration was it?

Answer 434 Years.

The Powder-Plot was discovered 88 Years after the Reformation, in 1517: The Murder of King *Charles* the First was committed 43 Years after that Discovery: The Accession of the *Brunswick* Family to the Crown, was in 1714; just 54 Years after the Return of King *Charles* the Second, who had lived in Exile ever since the Death of his Father *Charles* the First: How long was that?

Answer 12 Years.

A. is 13 Years younger than *B.* and 17 Years older than *C.* who in the Year 1711, was known to be 24 Years of Age: How old was each of these Persons in 1733?

Answer *A.* 63. *B.* 76. *C.* 46.

Arphaxad was born to *Shem* two Years after the Deluge, and 500 before his Father's Death; but at 35 Years of Age he had *Selah*, who at 30 was Father to *Eber*, who, at 34, had *Peleg*, and he lived 430 Years after that: The Question is, whether *Shem* or *Eber* died the first; and at ninescore and fourteen Years after the Death of the longer Liver, what Interval might be wanting to compleat the Term of 1000 Years after the Flood?

Answer, *Eber* was the Survivor by 29 Years. Interval 275 Years.

B. was born 14 Years after *C.* who came into the World 19 Years before *A.* who was 23 Years of Age eight Years ago: What then is the Age of *D.* who is within 22 Years of being as old as those three together?

Answer 95 Years.

B. was 14 Years old when *A.* was 25: How old shall *A.* be when *B.* comes to be 25?

Answer 36.

K. is 19 Years older than *L.* who was 27 Years of Age in the *South-Sea* Year, 1720: How old is *M.* in 1740, who, in the Year 1738, was within 24 Years of being as old as both of them together?

Answer 87.

PROMISSORY NOTES by Banker's Apprentices and Servants.

London, Jan. 27. 1740

I Promise to pay the Honourable *Charles Villiers*, Esq; or Bearer, on Demand, fifty Pounds,

For Sir *Richard Daventry* and Partners,

Charles Streeke.

PROMISSORY NOTES.

I promise to pay to the Honourable Directors of the *English* Company, Trading to *East-India*, or Bearer, on Demand, four hundred Pounds,

London, 174
For my Father *James Smith*,

400 l.

Thomas Smith.

I promise to pay the Royal *African* Company, or Bearer, on Demand, three thousand six hundred and forty four Pounds, thirteen and Six-pence,

London, 174
For my Master *Jennings* and *Wilbraham*.

3644 l. 13 s. 6 d.

Adam Tellmony.

MASTER'S PROMISSORY NOTES.

I Promise to pay Mr. *Edward Jones*, or Bearer, on Demand, seven hundred Pounds, Apr. 14. 1740.

700 l.

Simon Sogood.

I promise to pay to the Governor and Company of the Bank of *England*, nine thousand Pounds,
For Self and Partners,

9000 l.

Francis Fairfax.

I promise to pay *Jos. Penington*, Esq; Cashier of his Majesty's Revenue of Excise, or Order, forty Days after Date, four hundred and thirty Pounds, Value receiv'd,

London, 174
⌘ *Conrade Collector.*

I promise to pay *Paul Portfoken*, Esq; or Order, on Demand, three hundred ninety four Pounds two and Six-pence, Value receiv'd, this

174

394 l. 2 s. 6 d.

⌘ *Timothy Theobalds.*

PROMISSORY NOTES.

29

I promise to pay Sir *Joseph Jebb*, or Order, the Sum of thirty Pounds in Manner following; ten Pounds Part thereof, two Months after Date, ten Pounds more the 17th of *March* next, and the remaining ten Pounds, the 24th of *June* next following, the Value receiv'd : Witness my Hand, at *London* the
174

30 l.

Daniel Douglas.

Bromley, May 10. 174

100 l.

Borrowed and received of Mr. *Aaron Goodfriend*, the Sum of one hundred Pounds *Sterling*, which I promise to pay the said *Aaron Goodfriend*, or Order, upon Demand : Witness my Hand,

Witness { *John Brown.*
Geo. Radford.

Nic. Needham.

I promise to pay to Capt. *Alexis Edgecomb*, or Order, on Demand, eighteen Pounds, eight and nine-pence, furnish'd by my Order, to Lieutenant *Charles Cornwall*, as appears by his Receipts, deliver'd this 12th of *December*, 1740. to

18 l. 8 s. 9 d.

Hugh Harrold.

London, July 5. 174
I promise to furnish Mr. *Gregory Fitz-Harding*, with Bills of Ex^o. to the Value of five thousand Pounds *Sterl.* at current Exchange, payable to himself, or Order, in *Messina*, the next ensuing Fair : Value of Sir *John Trevor* receiv'd,

5000 l.

⌘ *Edward Effington.*

I promise to pay to *George Goosequill*, Esq; or Order, the Sum of fifty Pounds, on Demand, after Receipt of a Bill of Ex^o. drawn the 20th current by *Humphry Herringbone*, on *Henry Dasbet* of *Southampton*, Malster, for the like Sum payable to *William Pierce*, Esq; or Order, which said *Gregory Goosequill* has indorsed to me, this 28th of *January*, 174

50 l.

Alfred Dunning.

RECREATION.

I promise to return her Grace, the Duchess Dowager of *Tredegar*, or Order, on Demand, one Casket of Jewels, seal'd, one hundred Ounces of Gold-Plate, three hundred and fifty of *Ditto* Silver, seventy Carraets of Oriental Pearl, and a thousand Pound Bank-Note, receiv'd of her said Grace, For Self and Company, *Nov. 19, 174*

⌘ *Trojan Trusty.*

Receiv'd of *W. L.* Esq; nine Deeds, all relating to his Estate in the Parish of *Dovebridge*, near *Utoxeter*; which I promise to return the said *W. L.* or Order, undamag'd, on Demand: Witness my Hand this Day of *Aug 174*

Roger Norton.

Promissory Notes, for a valuable Consideration, should always mention the *Value receiv'd*, if the Thing it self be not specified; this gives them Validity in a Court of Judicature.

A Promissory Note, mentioning *Order*, is indorsible from one Person to another, which is done by the present Possessor's writing his Name on the Back of it, and delivering it up to the Party to whom he intends to assign over his Property therein.

'Tis unnecessary to have a Promissory Note payable to *Bearer* indorsed, if you are satisfy'd the Note is good.

The delivering up a Promissory Note to the Person who sign'd it, is a sufficient Voucher of its being paid; nor is there any need of writing a Receipt thereon.

Promissory Notes, and Book-Debts, if not legally demanded in the Space of six Years, cannot be recovered by Law.

If you keep a Promissory Note on *Demand*, in your own Hands above three Days, and the Person 'tis upon should fail, the Loss will be your own; but if he fail within the three Days, it will light, in *Equity*, on the Person that paid it you.

RECREATION VI.

ENGLAND was conquer'd by *William I.* Oct. 4. 1066; his Son *William II.* came to the Crown, Sept. 9. 1087, and left it, Aug. 2. 1100; *William III.* received it, Feb. 3. 1689, and died March 8. 1701: How many Days did each of these Princes govern, respect being had to the intercalary Days (added to *February*, every Leap-Year) as they rose in the Course of Time?

Ans. *Will. I.* 7645 Days. *Will. II.* 4711 Days. *Will. III.* 4416 Days.

Note, Every fourth Year is Leap-Year or Bissextile: To find which are such, divide the Year of our Lord by 4, and when nothing remains, those are the Leap-Years; and, to such, you add one Day more than 365.

R E C R E A T I O N.

31

A. born 161 Years ago, died when *B.* was 47 Years of Age, who it seems came into the World 180 Years since, and out-lived *A.* 43 Years: The Sum of the Ages of these two Persons is required? *Ans.* 99 Years.

If *Sampson* was born 17 Years after *Timothy*, and *Timothy* 26 Years before *Jacob*, who 28 Years hence will be just 50: In what Year of Christ were they severally born; the Question being proposed *Anno* 1740?

Answer *Jacob* 1718. *Sampson* 1709. *Timothy* 1692.

Richard the First, succeeded his Father *Henry* II. *July* 7. 1189; *John*, his Brother, succeeded him, *April* 6. 1199. *Richard* the Second succeeded *Edward* the Third on the 21st of *June* 1377; and was deposed by *Henry* IV. on the 30th of *September* 1399. The third *Richard* caused his Nephew *Edward* V. and his Brother, to be murder'd on the 18th of *June* 1483; and was slain himself on the 22d of *August* 1485. How many Days was the Realm govern'd by the three *Richards*, respect being still had to the intercalary Days, as they happened?

Answer 12492 Days.

A. born *Anno* 1108, lived 48 Years before *B.* who was 113 Years senior to *C.* and *X.* was 114 Years before *Y.* who was 74 Years after *Z.* born *Anno* 1527: In what Years of Christ were these Men severally born?

Answer *B.* 1156. *C.* 1269. *X.* 1487. *Y.* 1601.

A. born 445 Years before the Year 1733, died *Anno* 1362; *B.* born 37 Years ago, will die 18 Years hence; *C.* born 256 Years ago, died 197 Years since; *D.* born *Anno* 1578, lived till within 75 Years of said 1733: The length of these People's Lives are severally required?

Answer *A.* 74. *B.* 55. *C.* 59. *D.* 80 Years.

A. born *Anno Christi* 318, lived 207 Years before *B.* who liv'd 104 Years after *C.* who was Successor to *D.* 84 Years; *E.* was also 112 Years after *D.* but Predecessor to *F.* by 47 Years: In what Year of Christ did each of these Gentlemen flourish?

Answer *B.* 525. *C.* 421. *D.* 337. *E.* 449. *F.* 496.

The first Queen *Mary* came to the Crown, *July* 8. 1553; she reigned 5 Years, 4 Months, and 9 Days; her Sister *Elizabeth* succeeded, and *James* I. came to her Throne the 14th of *Mar.* 1602; he left it to his Son *Charles* I. on the 27th of *Mar.* 1625, who was forc'd from it, *Jan.* 30. 1648. The Question is, how many Days did these Princes reign, and at the Death of *Charles* I. how long had *England* been under an uninterrupted Succession of Protestant Princes (*Mary* I. being the last profess'd *Papist* that enjoy'd the Crown) not neglecting the intercalary Days in *February*, as before?

Answer *Eliz.* 16188. *Jam.* I. 8404. *Char.* I. 8709 Days.

If I am 42 Years older than you now, what will be the Difference of our Ages 14 Years after my Decease, in case you shall then survive?

Answer 28 Years.

A Dealer bought two Lots of Snuff, that together weigh'd *Cwt.* 9. 100 *lb.* for 97 *l.* 17 *s.* 6 *d.* Their Difference in point of Weight was *Cwt.* 1. 2 *qr.* 16 *lb.* and of Price 8 *l.* 13 *s.* 3 *d.* Their respective Weights and Values are requir'd?

Answer $\left\{ \begin{array}{l} \text{Lot 1. Cwt. 5 . 86 lb.} \\ \text{Lot 2. Cwt. 4 . 14 lb.} \end{array} \right.$ Cost 53 *l.* 5 *s.* 4 *d.* $\frac{1}{2}$.
44 *l.* 12 *s.* 1 *d.* $\frac{1}{2}$.

Double my Money for me, said *A.* to *B.* and I'll give thee Six-pence out of the Stock, which done, with the Remainder he apply'd to *C.* with the same Success, and he gave him also Six-pence for his good Nature: He repeated this very Proposition to *D.* and then Sixpence was all he had to give him: Pray what had he himself at first?

Answ. 5 d. $\frac{1}{4}$.

BILLS OF PARCELS.

The Honourable the Lady *Ashley*,

Bought of *Lemuel Linen-Draper* and Partner.

			s.	d.	
174					
14 Mar.	16 Ells of Dowlas	at	1 . 4	⌘ Ell	l.
	22 $\frac{1}{2}$ Ells of Holland	at	3 . 4		
	1 Ps. of Cambrick				3 . 4 . 6
	A Ps. of Muslin				2 . 17 . 3
	85 $\frac{1}{2}$ Ells of Diaper	at	1 . 10		
	19 $\frac{1}{2}$ Ells of Damask	at	4 . 3		
					<u>l. 22 . 17 . 8 $\frac{1}{2}$</u>

Madam *Strawberry*,

Bought of *Manywords Milliner*.

			s.	d.	
174					
13 Apr.	15 $\frac{1}{2}$ Yards of flower'd Ribband	at	2 . 3		l.
	3 Pair of <i>Roman</i> Gloves	at	9 . 4	⌘ Pair	
	6 Dozen of <i>Irish</i> Lamb, <i>Ditto</i>	at	1 . 3	⌘ Pair	
	7 Sarcenet-Hoods, white	at	4 . 6		
	15 Fans, <i>French</i> Paper Mount	at	3 . 3		
	A Ps. of <i>Meclin</i> Lace, 16 Yards	at	13 . 10	⌘ Yard	
					<u>l. 22 . 14 . 5 $\frac{1}{2}$</u>

The

BILLS of PARCELS.

33

The Right Honourable the Countess of *Night and Day*,

174

3 Feb.

		Bought of <i>Mary Tombs</i>			
		l.	s.	d.	
36 China Plates	at	0	3	8	each
18 Dishes, Ditto	at	0	10	6	
2 $\frac{1}{2}$ Pair of Jarrs, and a Pair of Beakers allow'd					
A Tea-Table Set complet					
Indian Sprig'd Muslin, 1 Ps. qt. 14 $\frac{3}{8}$ Yards	at	0	9	0	
Fine Chints, 10 Ps.	at	3	3	6	$\frac{1}{2}$ Ps.
					<u>l. 71 . 14 . 2 $\frac{1}{2}$</u>

Mrs. *Frances Pindust*,

Bought of *Isaac Hoffer*, 10 Apr. 174

		s.			d.	
15 Pair of Women's Worsted, mixt	at	5	7		$\frac{1}{2}$ Pair	l.
23 Pair of Men's Silk	at	17	4			
22 Pair of Men's Yarn	at	3	2			
18 Pair of <i>Norwich</i> Hose	at	4	9			
38 Pair of Thread	at	3	4			
13 Pair of Women's Gloves, Silk	at	4	8			
						<u>l. 41 . 4 . 11</u>

Mrs. *Sarah Johnson*,

Bought of *Theophilus Fruiterer*.

174

3 Apr.

		s.			d.	
7 Dozen of <i>Malaga</i> Limons	at	2	3		$\frac{1}{2}$ Dozen.	l.
8 $\frac{1}{2}$ Hundred of <i>Lisbon</i> , Ditto	at	7	2			
9 Ropes of <i>Spanish</i> Onions	at	1	6			
1 Bushel of <i>Ditto</i> Chestnuts						0 . 7 . 10
43 Dozen of best <i>China</i> and <i>Seville</i> Oranges	at	1	2			
12 Pomegranates	at	0	4	$\frac{1}{2}$		
						<u>l. 7 . 12 . 8</u>

BILLS of PARCELS.

Mr. Claude Cockson,

Bought of Robert Fishmonger and Partner.

			l.	s.	d.	
174						
27 Mar.	3 Hundred of Haberdine	at	7	10	6	each. l.
	1 $\frac{1}{2}$ Hundred of Ling	at	8	12	6	
	4 $\frac{1}{2}$ Hundred of Stockfish	at	4	10	6	
	4 Kegs of Sturgeon	at	0	16	10 $\frac{1}{2}$	
	6 $\frac{1}{2}$ Barrel of Herrings	at	3	10	2	
	95 Dried Salmon	at	0	1	2	

l. 87 . 11 . 11

James Bateman, Esq;

Bought of Clement Coffeeseller, Feb. 10. 174

			s.	d.	
27 $\frac{1}{2}$ Pound of Smyrna Coffee	at	5	8	$\frac{1}{2}$	Pound. l.
33 Pound of Mocha, Ditto	at	5	4		
26 $\frac{1}{2}$ Pound of Imperial Tea	at	25	0		
10 $\frac{1}{2}$ Pound of best Bohea	at	14	6		
13 Pound of Royal Green Tea	at	18	8		
21 Pound of Sugar double refin'd	at	1	0	$\frac{1}{2}$	

l. 70 . 13 . 4

The Honourable Mrs. Vaughan,

Bought of Simon Salter, and Partner.

			s.	d.	
174					
5 June.	13 $\frac{1}{2}$ Pound of Anchovies	at	1	4	$\frac{1}{2}$ Pound. l.
	30 Pound of Capers	at	0	10	$\frac{1}{2}$
	12 $\frac{1}{2}$ Pound of Salt-petre	at	1	2	$\frac{1}{2}$
	2 $\frac{1}{2}$ Gall. of pickl'd Mushrooms	at	3	7	$\frac{1}{2}$ Quaft.
	4 $\frac{1}{2}$ Gall. of Lucca Oil	at	12	0	$\frac{1}{2}$ Gallon.
	A Westphalia Ham, wt. 20 lb.	at	0	11	$\frac{1}{2}$ Pound.

l. 8 . 8 . 7

35

Bought of *James Pewterer*, and *Jonathan Brasier*.

174		s.	d.	
On.	20.	Hard-metal Plates, 3 doz. wt. 50 lb. ——— at	1 . 4	⌘ Pound. ——— l.
		8 Dishes Ditto, a Monteth, and Cullander, wt. 40 lb. at	1 . 6	—————
		A Copper, with a discharging Cock, wt. 66 $\frac{1}{2}$ lb. — at	1 . 4 $\frac{1}{2}$	—————
		Iron-Work to Ditto, and a Crane, wt. 97 lb. — at	0 . 2 $\frac{3}{4}$	—————
		A Stove Grate, with Shovel, Tongs, Poker and Fender	—————	l . 18 . 6
		A large Brass Pot and Saucepan, wt. 38 lb. — at	1 . 7	—————
				l . 16 . 19 . 0

Bought of *Ferdinand Furrier*, May 5. 174

Coney Skins, 1300	_____	at	13 . 6	⌘ Hund.	_____	l.
Beaver, 180 lb.	_____	at	7 . 8	⌘ Pound.	_____	
A Sable Muff and Tippet, allow'd	_____				_____	21, 0. 0
Fitch-Skins, 90	_____	at	0 . 3 $\frac{1}{2}$	⌘ Skin	_____	
Otter-Skins, 50	_____	at	2 . 0		_____	
Hare-Skins, 140	_____	at	9 . 6	⌘ Hund.	_____	
						l. 108 . 5 . 0

Bought of *Adam Leatherseller.*

	s.	d.	
Nov. 17. Large oil'd Lamb-Skins, 215 _____ at 1 . 3 $\frac{1}{2}$ Skin _____ l.			
Goat-Skins, 130 _____ at 0 . 11 $\frac{1}{4}$ _____			
Allom'd Sheep-Skins, 137 _____ at 1 . 3 _____			
Calves-Skins, 19 _____ at 4 . 3 _____			
Oil'd-Buck, 15 _____ at 12 . 9 _____			
Russia Hides, 82 _____ at 12 . 9 _____			

1. 94 . 8 - 4

BILLS of PARCELS.

Capt. John Elford,

Bought of Thomas Cheesemonger.

		Cwt.	qr.	lb.		l.	s.	d.	
174									
Dec. 21.	Old Cheshire Cheeses, 12	5	2	24	at	1	17	4	⌘ Hund. l.
	Glocestershire Cheeses, 45	4	2	10	at	1	12	6	
	Firkins of Butter, 12				at	1	10	0	each.
	Stilton Cheeses, 93	2	3	25	at	2	16	10	⌘ Hund.
	Flitches of Bacon, 7			wt. 49 Stone.	at	0	3	4	each.
	Suffolk Butter, 12 Weys				at	8	3	8	

l. 150 . 18 . 9

Mr. Jonathan Marriot,

Bought of Mr. Geo. Grocer and Company.

		Cwt.	qr.	lb.		l.	s.	d.	
174									
Mar. 12.	Sugar, 2 Hhds.	17	2	17	at	1	13	10	⌘ Hund. l.
	Raisins, 11 Barrels	12	1	19	at	1	14	5	
	Tobacco, 1 Hhd	4	—	12	at	4	19	4	
	Rice, 1 Barrel	1	—	15	at	2	16	4	
	Pepper, 1 Bag	1	3	19	at	3	12	4	
	Brimstone	2	1	19	at	1	19	1	
	Bees-Wax, 4 Cakes	2	2	12	at	1	18	4	

l. 91 . 9 . 9½

Mrs. Jane Somerset,

Bought of Edmund Brisk, and Oswald Obliging.

			s.	d.				
174								
9 Nov.	12 ¾ Yards of rich brocaded Sattin	at	18	6	⌘ Yard.			l.
	6 Yards of Mohair	at	4	2				
	25 ½ Yards of Paduasoy	at	11	8				
	15 ½ Yards of flower'd Damask	at	8	8				
	34 ½ Yards of Poplin	at	3	0				
	12 ½ Yards of Italian Mantua	at	7	6				
	30 Yards of double Taffaty	at	2	9				

l. 48 . 8 . 9½

RECREATION.

37

When the Money is paid down, either of the Partners may write,

Receiv'd then presently of Madam *Somerset*, the Sum of Forty-eight Pounds, eight Shillings and nine Pence, in full of all Demands, for Self and Partner,

☞ *Oswald Obliging.*

Mr. *Charles Thorold*,

Bought of Sir *William Ashurst* and Company, Feb. 8. 1741-2.

	s.	d.	
10½ Yards of <i>Yorkshire</i> Cloth	at	6 . 6	☞ Yard. <u>1.</u>
7 Yards of fine <i>Spanish</i> Black	at	16 . 3	
6½ Yards of fine grey Cloth	at	15 . 9	
16½ Yards of Frieze	at	3 . 6	
4 Yards of second Drab	at	15 . 6	
5½ Yards of superfine <i>Spanish</i> Cloth	at	18 . 6	
31 Yards of Livery Scarlet Cloth	at	13 . 0	
			<u>1. 46 . 0 . 7½</u>

Receiv'd at the same time, the full Contents, for Sir *William Ashurst* and Company,

☞ *Michael Medcalf.*

RECREATION VII.

BY God's Blessing upon a Merchant's Industry, in ten Years Time he found himself possessed of 13000 *l.* It appear'd from his Books that the last three Years he had clear'd 873 *l.* a Year, the three preceeding but 586 *l.* a Year; and before that but 364 *l.* a Year. The Question is, what was the State of his Fortune at every Year's End that he continued in Trade, and consequently what had he to begin with?

Answer 7167 *l.* original Stock.

A. born Anno 1441, lived till *B.* was 7 Years of Age, which was 23 Years before the Reformation, in 1517, *B.* surviv'd this remarkable *Æra* just 49 Years; *C.* born 9 Years after the Death of *A.* lived but till *B.* was 36 Years of Age: The Sum of the Ages of these three Persons is requir'd?

Answer, Their Sum is 152 Years.

RECREATION.

Sam was born 28 Years before *Toby*, who died at 12, and lived 19 Years after him. *Rachel* came to light when *Sam* was 16, and died 11 Years before him. *Joshua*, when *Rachel* was 7 Years, being himself then 14, went abroad, where he continued 9 Years, and returning, survived *Rachel* 4 Years. How old was each of these, and what is the Sum of their Ages?

Answer, Sum 146 Years.

A Grant was made Dec. 14. in the 10th of *Henry I.* who began his Reign Aug. 2. 1100; 'twas resum'd November 19. in the 4th of *Henry III.* who came to the Crown Oct. 19. 1216; 'twas reviv'd the 16th of July, in the 13th of *Henry VII.* who ascended the Throne Aug. 22. 1485; But it was a second Time revoked, and finally suppress'd in the 16th of his Successor *Henry VIII.* on the 10th of May. Now as this Man's Father died July 21. 1509; the Question is, how many Days was this Grant in Force, and how many did it lie dormant?

Answer, 49947 Days in Force; superceded 101413 Days.

A. born Anno 1438, died at 48 Years of Age; *B.* died Anno 1502, aged threescore and seventeen; *C.* in the Year 1577, was 22 Years of Age, and surviv'd that Time 54 Years: *D.* Anno 1616, had liv'd just half his Time, and died in 1648; *E.* was 13 Years old, at the Death of *D.* and 14 Years after that, was Father to *F.* who was 31, when his Son *G.* was born; who, at his Grandfire's Death, was 7 Year's of Age: The Years of Christ, wherein these Men were born, and the Year wherein the first five of them died, are severally requir'd?

Answer { Birth, *A.* 1438. *B.* 1425. *C.* 1555. *D.* 1584. *E.* 1635. *F.* 1662. *G.* 1693.
Demise, 1486. 1502. 1631. 1648. 1700.

A. born 17 Years after *C.* and 13 before *B.* died 42 Years before the present King's Inauguration in 1727, aged 47 Years; *C.* died Anno 1712, and *B.* exactly 8 Years before him; *D.* born 23 Years before *C.* died at 64; *E.* born 11 Years after *B.*'s Death, will die 12 Years after the Year 1733; and *F.* born just in the Midway of the Interval, between the Births of *A.* and *D.* is not to reach the Time of *E.*'s Death by 14 Years: What is the Sum of all their Ages, and which of them liv'd longest?

Answer, The Sum 398 Years. *F.* Senior by 22 Years.

A Person said he had 20 Children, and that it happen'd there was a Year and half between each of their Ages; his eldest was born when he was 24 Years old, and the Age of his youngest is now one and twenty: What was the Father's Age?

Answer, 73 $\frac{1}{2}$ Years.

A Sheep-Fold was robb'd three Nights successively; the first Night half the Sheep were stolen, and half a Sheep more; the second Night half of the Remainder were lost, and half a Sheep more; the last Night they took half what were left, and half a Sheep more, by which time they were reduced to twenty: How many were there at first?

Answer, 167.

BILLS

BILLS on BOOK-DEBTS.

The Right Honourable the Lord *Bolfever*, Dr.

To Paul Purseproud, Upholder.

			l.	s.	d.
174 .					
Apr.	19.	A rich Crimfon Damask Bed, laced, compleat	75	—	—
May	5.	A Set of Window-Curtains, and Vallance, <i>Ditto</i>	16	11	8
	7.	A fine Carpet, Counterpane, and an Otter-down Quilt	12	10	—
June	6.	A Crimfon Velvet Easy Chair, and 2 Stools, <i>Ditto</i>	13	7	6
	13.	A wrought Dimety Bed, and Furniture, compleat	28	18	4
Aug.	10.	A Down Bed, Bolster, Pillows, with a Mattress and Quilt	15	—	—
		Chairs 10, with two-arm'd <i>Ditto</i> , Wallnut-tree fram'd	34	12	6

Sum l.

If a Servant receives the Bill, let the Receipt run thus:

Receiv'd the 30th of *December* 174 . of the Right Honourable the Lord *Bolfever*, by the Hands of Mr. *Simon*
Steward, the full Contents, for my Master *P. Purseproud*,

A. Batchelor.

Her Grace the Dutcheff of *Plinlimon* Dr.

To Crew Cabinetmaker.

			l.	s.	d.
174 .					
Octob.	3.	A Chimney Glafs, and a Pair of Sconces	5	18	—
		A Pair of Pier Glaffes 72 Inches, in gilt Frames	30	—	—
	10.	A Pair of <i>Indian</i> Cabinets, at 43 l. 10 s. each			
		A fine <i>Indian</i> four-leav'd Screen, and a Fire Screen	17	10	—
Nov.	18.	A Book-Cafe, with Glafs Doors, and a Corner-Cupboard, <i>Ditto</i>	21	—	—
	30.	A Wallnut-Tree Table, and a Set of Dressing Boxes, japan'd	3	4	10
Dec.	7.	A Tea Table and Stand plated, wt. 103 oz. at 8 s. 4 d. $\frac{1}{2}$ oz.			
	30.	A Dozen and half of fine matted Chairs, at 18 s. 6 d. each			

l. 224 . 4 . 2

BILLS on BOOK-DEBTS.

Receiv'd the 31st of December, 174 of Her Grace the Duchess of *Plinlimon*, Fifty Pounds in Part for Mr. *Crew Cabinetmaker*,
 & *Fairspoken Fairfax*.

Mr. *James Shortmeasure*, Dr.

To *Walstone Winecooper*,

174			s.	d.		
Mar.	28.	Palm Sack, 18 Gallons	at	8 . 6	& Gall.	l.
Apr.	13.	Port Red, 35 Gall.	at	5 . 4		
May	26.	Sherry, 17 Gall.	at	6 . 6		
	31.	Rhenish, 19 Gall.	at	6 . 8		
Jul.	13.	White Lisbon, 32 Gall.	at	4 . 10		
	20.	A Double Chest of Florence agreed for				4 . 0 . 0
Aug.	30.	10½ Dozen of best Burgundy	at	50	& Doz.	
		7 Dozen of Côte-rotie	at	2	Guineas.	
						<hr/> l. 81 . 10 . 6 <hr/>

The Reverend Mr. *Euclid Peachy*, Dr.

To *John Percival* and Partners.

174			s.	d.		
Mar.	27.	Oats	5 Qrs.	at	2 . 3	& Bush. l.
Apr.	9.	Beans	9 Bush.	at	4 . 10	
May	16.	Bran	7 Qrs.	at	1 . 10	
Jun.	19.	Tares	19 Bush.	at	1 . 11	
	24.	Peas	16 Bush.	at	3 . 11½	
Jul.	2.	Pale Malt	28 Bush.	at	3 . 2	
	17.	Hops	17 Pound.	at	1 . 4	
						<hr/> l. 22 . 7 . 3 <hr/> Mess.

BILLS on BOOK-DEBTS.

41

Mess. Drake and Compton, Dr.

To Richard and Jacob Broughton, Dyer.

For Dying the Goods following, deliver'd ϕ Order, to Edward Evelyn, Packer.

				l.	s.	d.		
174								
May	7.	Exeter Stuffs, yellow	70 Ps.	at	0	14	0	Ps.
	13.	Norwich Ditto, blue	30	at	0	11	6	
	20.	Tamies, black	42	at	0	12	8	
July	1.	Colchester Bays, green	28	at	0	9	0	
	28.	Camlets, Orange	21	at	0	15	0	
								l. 121 . 4 . 0

Mr. Rowland Upholder, Dr.

To William Warehouse and Company.

				l.	s.	d.		
174								
Oct.	7.	Superfine $\frac{1}{4}$ Blankets	17 Pr.	at	1	3	10	
	9.	Medium Ditto	13	at	0	13	6	
		Harrateen blue	31 Ps.	at	2	5	8	
Nov.	6.	Cheney Ditto	20	at	1	18	0	
	18.	Green Lintfeys	10	at	1	8	0	
Dec.	9.	15 printed Callico Quilts	$\frac{3}{4}$	at	0	16	8	
								l. 164 . 6 . 4

The Honourable Sir Michael Newton, Knight of the Bath, Dr.

To Thomas Goldsmith.

				oz.	dwt.	gr.		s.	d.
174									
May	31.	A Silver Set of Casters	wt.	25	10	10	at	7	9
Jul.	7.	Half a Doz. Soup Plates		85	14	15	at	6	6
	10.	A Silver Teapot and Lamp		29	16	15	at	6	4
Aug.	9.	A large Punchbowl		67		16	at	6	10
	11.	A Dozen Desert Knives, Forks, and Spoons, with a Shagreen Case							40 . 0 . 0
Nov.	6.	A Dozen Silver Spoons	wt.	33	11	10	at	6	2
									l. 120 . 8 . 11

BILLS on BOOK-DEBTS.

Mrs. Ann Finch, Dr.

To Samuel Silkman and Partner.

		lb.		s.	d.	
174	Jul. 30.	Tripoli Belladine Silk	44	at 19	10	⌘ Pound.
	Aug. 10.	Legee of Smyrna	12½	at 16	7	
		A Fangot of raw Silk	130	at 13	8	
	Sept. 15.	Ditto of Ardas	118	at 12	4	
	30.	Gold and Silver Twist	17	at 6	4	⌘ Ounce.
		Twisted Silk in grain	12½	at 3	0	

l. 331 . 2 . 7

Mr. Charles Cloudesty, Dr.

To Joseph Ironmonger.

				s.	d.	
174	Jun. 10.	Spring Door Locks with Hinges	19	at 4	3	each
	Do. 19.	Bolts	42 Pounds	at 0	9	
	Aug. 1.	Birmingham Brads Locks	36	at 7	6	
	24.	A Cast-Iron Back, Cwt.	1	at 14	8	⌘ Cwt.
	Sept. 10.	Sheffield Nails	2	at 0	4	⌘ lb.
	21.	Plate-Iron	3	at 0	6	⌘ lb.

l. 34 . 4 . 8

Mr. Humphry Virginia, Dr.

To Thomas Tobacconist.

			Cwt.		s.	d.	
174	Mar. 26.	1 Hhd. of best bright Tobacco	qt. Nt. 5½	at 0	10	⌘ lb.	
	Apr. 15.	1 Box of Oroonoko	qt. Nt. 75½ lb.	at 0	11	⌘ lb.	
	19.	5 Bags of old Spanish	qt. Nt. 684 lb.	at 0	4	⌘ lb.	
	May 25.	½ Hhd. — qt. Gr. 335. Tr. 42 is Nt. lb. 293		at 0	5	⌘ lb.	
	27.	2 Rolls.	qt. Nt. 94 lb.	at 1	5	⌘ lb.	

l. 54 . 14 . 2

BILLS on BOOK-DEBTS.

43

Mess. Owen and Oswald, Dr.

To Tho. Teadust and Conrade Coffeepot, Druggist.

174		Cwt.	lb.	lb.		l.	s.	d.	
Oct.	13. Galls. ———	wt.	1½	Tr. 12. Nt. 156 ———	at	0 . 0 . 9½	4	lb. ———	l.
	27. Mestica Cochineal ———	18½	Pounds ———		at	1 . 12 . 10			
Nov.	16. Scammony ———	37½	Pounds ———		at	0 . 10 . 0			
	19. Gum Arabick ———	127			at	0 . 0 . 8½			
Dec.	1. Sassafras ———	3½	Hundred ———		at	0 . 0 . 3½			
	31. Opium ———	10½	Pounds ———		at	0 . 6 . 0			
Jan.	11. Tea, one Canister ———	75			at	0 . 13 . 8			
	24. Asa Foetida ———	48			at	0 . 1 . 6			
Feb.	9. Contrayerva Root ———	7½			at	0 . 18 . 6			

l. 129 . 7 . —

Mess. Somerset and Draper, Dr.

To Blackwell Hall and Company.

174					s.	d.	
Sept.	3. Serge de Nifmes ———	13 Ps. ———	each 30 Yards ———	at	3 . 10½	4	Yard ——— l.
	7. Silk Drugget ———	24 ———	each 28½ ———	at	5 . 10		
Oct.	12. Grograms ———	30 ———	each 41 ———	at	2 . 8		
	19. Silk Camblets ———	11 ———	each 40 ———	at	3 . 1½		
Nov.	6. Duroys ———	40 ———		at	32 . 0	4	Ps. ———
	30. Shalloons ———	51 ———		at	50 . 0	4	Ps. ———
	Anterines ———	10 ———	each 26½ ———	at	2 . 2	4	Yard. ———
Dec.	10. Sagathy ———	23 ———	30 ———	at	1 . 4		

l. 774 . 14 . 2

BILLS on BOOK-DEBTS.

The Right Honourable Richard Earl of Castlemain, Dr.

To Benj. Builder, for Work and Materials in his House at Henly-Park, Surrey.

					<i>l.</i>	<i>s.</i>	<i>d.</i>	
174	Mar. 27.	Oaken Timber	12 Load	at	2	5	0	a Ton
	30.	Fir Timber	35 Ton	at	1	12	10	a Load.
Apr.	5.	Oaken Plank	96 Foot	at	0	0	3 $\frac{1}{2}$	Foot
	16.	Norway Deals	590	at	6	15	0	Hund.
		Sixpenny Nails	29 Thousand	at	0	3	10	Thous.
May	5.	Ten Groat Nails	3 Hundred	at	0	14	10	Ditto.
Jun.	28.	Work for my self	90 Days	at	0	3	4	
		Ditto for 3 Men	90	at	0	2	6	each.
		Wainscot	73 Yards 7 Feet	at	0	3	2	Yard agreed.
		Double Quarter	58 Feet	at	0	0	4	Foot.

l. 181 . 8 . 11

Note, Deals and Nails are 120, or six Score to the Hundred. 50 Feet are a Load, and 40 Feet a Ton of Timber. 100 square Feet are the Square of Carpentry, Tyling, &c.

Sir Edward Cornwall, Dr.

To Bernard Bricklayer, for Work and Materials in his House on Tower-Hill, London.

					<i>s.</i>	<i>d.</i>	
174	Mar. 28.	Bricks	25 Thousand	at	15	7	Thous.
	30.	Tiles	11 Ditto	at	19	5	
Apr.	1.	Lime	28 Hundred	at	15	11	Hund.
	12.	Sand	19 Load	at	3	10	Load.
May	24.	Ridge-Tiles	149	at	8	1	Hund.
Jun.	28.	Work for myself	90 Days	at	3	0	Diem.
		Ditto for a Labourer	90	at	1	8	
		Ditto for my Man	90	at	2	6	

l. 88 . 18 . 8

A Brick ought to be 9 Inches long, 4 $\frac{1}{2}$ broad, and 2 $\frac{1}{2}$ thick. 500 Bricks are a Load. A thousand Tiles the like. 25 Bushels are a Hundred of Lime. About 3000 Bricks will make a Rod of Brick-work, viz. 272 $\frac{1}{4}$ sq. Feet, a Brick and a half thick.

R E C R E A T I O N.

45

The Right Honourable *Charles, Lord Bruce, Dr.*

For Bricklayers Work at *Savernacle, Wilts*, perform'd by *Philip Pilafter*.

Brick-work, 50 Rods, 68 Feet Statute Measure	at	5	10	0	⌘ Rod.	1.
Tyling plain, 15 Square, 75 Feet	at	2	3	0	⌘ Square.	
Rub'd Return, 250 Feet	at	0	3	0	⌘ Foot.	
Streight Arch, 72 Feet	at	0	2	0		
Jack Arch, 36	at	0	2	3		
Paving with 10 Inch Tiles, 1769 Feet	at	0	0	3½		

Measured and Valued *July 10, 174*

£ 384. 15. 18

⌘ *William Sonds.*

R E C R E A T I O N VIII.

THE Silk Mill at *Derby* contains 26586 Wheels, and 97746 Movements, which wind off or throw 73726 Yards of Silk every Time the great Water-Wheel, which gives Motion to all the rest, goes about, which is three Times in a Minute. The Question is, how many Yards of Silk may be thrown by this Machine in a Day, reckoning ten Hours a Day's Work, and how many in the Compass of a Year, deducting for *Sundays* and great Holidays 63 Days, provided no Part of it stand still?

Answer 40077453600.

What Difference is there between twice eight and twenty, and twice twenty eight : As also between twice five and fifty, and twice fifty five ?

Answer 20. Answer 50,

What is the Difference, and what the Sum of fix dozen Dozen, and half a dozen Dozen ?

Answer Diff. 792. Sum 936.

What Number, taken from the Square of 54, will leave 19 times 46 ?

Answer 2042.

Subtract 30079 out of fourscore and thirteen Million, as often as it can be found, and say what the last Remainder exceeds or falls short of 21180 ?

Answer, Remainder 4631 more.

RECREATION

What Number, added to the forty third Part of 4429, will make the Sum 240 ?

Answer 137.

What Number, deducted from the 26th Part of 2262, will leave the 87th Part of the same ?

Answer 61.

What Number, multiply'd by 72084, will produce 5190048 exactly ?

Answer 72.

What Number, divided by 419844, will quote 9494, and leave just a third Part of the Divisor remaining ?

Answer 3986138884.

The Sum of two Numbers is 360 ; the less is 114 : What is their Difference, Product, and larger Quote ?

Answer 132. 28044. $2\frac{2}{3}$.

I would plant 2072 Elms, in 14 Rows, 25 Feet asunder : How long will this Grove be ?

Answer 616 $\frac{2}{3}$ Fathoms.

H A Brigade of Horse, consisting of 384 Men, is to be form'd into a square Body, having 32 Men in Front :
ow many Ranks will there be ?

Answer 12.

The Spectators Club of fat People, though it consisted but of 15 Persons, is said, N^o. 9. to weigh no less than three Tons : How much at an Equality was that ϕ Man ?

Answer Four hundred Weight.

The Remainder of a Division is 423 ; the Quotient 423 ; the Divisor is the Sum of both and 19 more : What then was the Number to be divided ?

Answer 366318.

What Number is that, from which if you deduct the 25th Part of 22525, and to the Remainder add the 16th Part of 9696, the Sum will be 1440 ?

Answer 1735.

A Person dying left his Widow 1780 *l*. and 1250 *l*. to each of his four Children, 30 Guineas a-piece to 15 of his poor Relations, and 150 *l*. to Charities ; he had been $25\frac{1}{2}$ Years in Trade, and at an Average had clear'd 126 *l*. a Year. What had he to begin with ?

Answer 4189 *l*. 10 *s*.

The Globe of the Earth, under the Line, is 360 Degrees in Circumference, each Degree by $\frac{1}{2}$ Miles ; and this Body being turn'd on its own *Axis*, in the Sydereal Day, or 23 Hours 56 Minutes : At what Rate an Hour are the Inhabitants of *Bencolen*, situate in the midst of the burning *Zone*, carried from *West* to *East*, by this Rotation ?

Answer 1045 $\frac{11}{12}$ Miles.

A Fellow was saying, that when he told over his Basket of Chestnuts, two by two, three by three, four by four, five by five, or six by six, there was still an odd one ; but when he told them seven by seven, they came even ; How many had he ?

Answer 721.

BILLS of PARCELS, used by Merchants and Wholesale Dealers.

Mr. Samuel Robinson,

London, April 4. 174

Bought of William Stapleton, 6 Parcels of French Cloth, to pay at 6 Months, as follows, viz.

			l.	s.	d.	
N ^o .	4.	qt. 3 Ps. Dowlas	at 3.	6.	0	l.
	7.	4 Ps. Ditto	at 4.	10.	0	
	8.	3 Ps. Ditto	at 4.	15.	0	
	14.	3 Ps. Lockrams	at 2.	15.	6	
	17.	3 Ps. Ditto	at 2.	18.	0	
	20.	4 Ps. Ditto	at 2.	7.	6	
						<hr/>
20 Ps. in all amount to						<hr/> l. 68. 13. 6 <hr/>

William Cobb, Esq; Oct. 21. 174

Bought of James Inwyn and Partner, 8 Bags of Farnham Hops for ready Money, viz.

N ^o .		Cwt.	qr.	lb.	
1.		2.	2.	18	
2.		2.	3.	10	
3.		2.	2.	17	
4.		2.	1.	0	
5.		3.	0.	8	
6.		3.	1.	3	
7.		3.	0.	20	
8.		2.	2.	7	
					<hr/>
Cwt.					at 11 d $\frac{1}{4}$ Pound
					<hr/> l. 116. 15. 4 <hr/>

Mr.

Bills of Parcels used by Merchants, &c.

Mr. Daniel Waite,

London, Jan. 7. 174

Bought of Patrick Jefferies, 6 Casks of Barbados Sugar, at a Month, viz.

	Cwt.	gr.	lb.	gr.	lb.
N ^o 81.	wt.	8	3	23	— Tare 3 . 7 each.
82.		8	2	21	
83.		8	0	12	
84.		8	1	16	
85.		7	3	20	
86.		8	0	16	

Gr.

Tr.

Nt.

s. d.
at 47 . 6 $\frac{1}{2}$ Cwt. l. 107 . 13 . 7

Mr. Richard Sands,

Bought of Ann Smart and Company, Sept. 13. 174

5 Buts of Rape-Oil, viz.

	Cwt.	gr.	lb.	gr.	lb.
N ^o 43.	wt.	10	0	10	— Tare 2 . 13
48.		11	2	18	2 . 26
52.		10	1	0	2 . 13
57.		11	0	12	2 . 21
60.		12	3	17	3 . 9

Gr.

Tr.

Cwt.

Nt.

Gall.

at 23 l. 16 s. $\frac{1}{2}$ Tun. l. 79 . 2 . 1

Note, The Tun of sweet Oils is 236 Gall. and 7 lb. $\frac{1}{2}$ Net make a Gall. of Oil.

†

Sir

Bills of Parcels used by Merchants, &c.

49

Sir Andrew Gossling and Company,

Bought of the United East-India Company, &c. at four Months.

Nov. 27. 174

Pepper, 2 Lots, viz.

			Cwt.	qr.	lb.		lb.
N ^o .	17.	10 Bags	qt.	27	. 1 . 18	Tr.	150
	20.	10 Ditto		24	. 3 . 24		138
			Gr.				
			Tr.				
			Nt.		at 10 $\frac{1}{2}$ d.	per lb.	l.

Red-wood, 2 Lots, viz.

			Ton.	Cwt.		
N ^o .	47.	120 Sticks		10	. 13 $\frac{3}{4}$	
	48.	100 Ditto		11	. 12	
		220 Sticks wt.			l. s.	
					at 3 : 7 $\frac{1}{2}$ d.	per Ton. l.

Wormseed, 3 Bales, viz.

			Cwt.	qr.	lb.	
N ^o .	18.		wt.	3	. 1 . 10	
	24.			4	. 2 . 0	
	37.			2	. 3 . 19	
			Gr.			
			Tr.	1	. 0 . 15	
			Nt. Cwt.		at 13 $\frac{1}{2}$ d.	per lb. l.

l. 376 . 8 . 8

Mr.

G

Bills of Parcels used by Merchants, &c.

Mr. Peter Paydown & Company,

London, April 24. 174

Bought of Titus Tradewell for ready Money, Cotton 14 Bags, viz.

	Cwt.	qr.	lb.
N ^o . 1. ———	qt. 3	. 1	. 7
2. ———	2	. 3	. 0
3. ———	2	. 3	. 5
4. ———	3	. 0	. 15
	11	. 3	. 27
	12	. 1	. 1

	Cwt.	qr.	lb.
N ^o . 17. ———	2	. 3	. 16
24. ———	3	. 1	. 10
28. ———	3	. 0	. 27
30. ———	2	. 3	. 4
	12	. 1	. 1

24 . 1 . 0

0 . 3 . 13

23 . 1 . 15

Total Gross.

Tare allow'd.

lb.

Suttle 2619.

Tret. 100.

More, viz.

	Cwt.	qr.	lb.
N ^o . 30. ———	2	. 3	. 12
31. ———	3	. 0	. 10
32. ———	3	. 1	. 26
33. ———	3	. 2	. 8
34. ———	2	. 2	. 7
35. ———	1	. 3	. 10

Net. 2519 at 14 d. ₤ lb. ——— l.

Damag'd.

Gr.

Tr. 0 . 2 . 11

lb.

Suttle.

Tret.

Net.

at 4 d. ₤ Pound. ——— l.

l. 177 . 2 . 2

R E C R E-

RECREATION IX.

THere are 2 Numbers; the bigger of them is 73 times 109, and their Difference 17 times 28. I demand their Sum and Product?

Answ. 15438, and 59526317.

I would put 60 Hogsheads of *London-Beer* into 30 Wine Pipes, and would know what the Cask must hold, that receives the Difference; 231 solid Inches being the Gallon of Wine, and 282 that of Beer.

Answ. 143 $\frac{22}{4}$ Beer Gall.

The continual Multiplication of the nine Digits will give the Number of Changes that may be rung on 9 Bells (as well as of any other Combinations) how many are there?

Answ. 362880.

There are two Numbers, the less is 187, the Difference 34; give the Square of their Product, *D.* of their Sum and Difference, and the Sum of those Squares?

Answ. Sum of Sq. 1708088549.

There are two Numbers, whose Product is 1610, the greater is given 46: What is their Sum, Difference and Quotes; what the Sum of their Squares, and what the Cube of their Difference?

Answ. Sum of Sq. 3341. The Cube of Diff. 1331.

There are other two Numbers, the greater 7050, which divided by the less, quotes 94: What is the Difference of their Squares; and what the Square of the Product of their Sum and Difference?

Answ. Diff. of Sq. 49696875.

There are still two Numbers, 75 is the less, to which the greater is in Proportion, as 8 to 5: What is the Sum, and the Product of their Sum and Difference; the Difference and Product of their Squares, and the Sum of the Squares of their two Quotes, the greater divided by the less, and the less again by the greater?

Answ. Sum of Sum and Diff. 240. Diff. Sq. 8775. Sum Sq. quotes $2\frac{11}{1600}$.

There are two Numbers more, the greater 224, bearing Proportion to the other, as 8 to 7: What is the Square of their Sum, Difference and either Quote; and what is the Result of the Square of the Sum of their Difference, added to the Product of their Sum and Difference.

Answ. Sq. of Sum 176400. Sq. Sum of Diff. and Prod. 138956944.

In order to raise a joint Stock of 10000 *l.* *L. M.* and *N.* together subscribe 8500 *l.* and *O.* the rest: Now *M.* and *N.* are known together to have set their Hands to 6050 *l.* and *N.* has been heard to say, that he had undertaken for 420 *l.* more than *M.* What did each Proprietor advance?

Answ. *L.* 2450 *l.* *M.* 2815 *l.* *N.* 3235 *l.* *O.* 1500 *l.*

G 2

A. B.

RECREATION.

A. B. and C. play in concert at Hazard; and at making up Accompt, it appears that A. and B. together brought off 13 l. 10 s. B. and C. together, 12 l. 12 s. and A. and C. together, won 11 l. 16 s. 6 d. What did they severally get?

Answer A. 6 l. 7 s. 3 d. B. 7 l. 2 s. 9 d. C. 5 l. 9 s. 3 d.

Some others advance in Trade as follows, viz. *W. X. and Y. raised 350 l. 10 s. W. X. and Z. 344 l. 10 s. X. Y. and Z. made up together 400 l. and W. Y. and Z. contribute 378 l. 4 s. In the conclusion, they parted with their joint Property for 450 Guineas: What did they gain or lose by their Adventure.*

Answer They lost 18 l. 11 s. 4 d.

By selling 240 Oranges at five for 2 d. half of which cost me two a Penny, and the other half three a Penny, I evidently lose a Groat: Pray how comes that about?

Answer There were twenty penny-worth more of the last Sort bought, than of the first, which at the selling Price mention'd, will fetch but 16 d. whereas they cost me 20 d.

In a Series of proportional Numbers the first is 5, the third 8; the Product of the second and third is 78,4: What is the Difference of the second and fourth?

Answer 5,88.

What Quantity of Water will you add to a Pipe of Mountain Wine, Value 33 l. to reduce the first Cost to 4 s. 6 d. the Gallon?

Answer 20 $\frac{2}{3}$ Gallons.

If the Cubick Inch of Oil Olive be ,52835 decimal Parts of an Ounce *Avourdupoiz*; what Quantity of Oil, weighing 7 $\frac{1}{2}$ Pounds $\frac{1}{4}$ Gallon, will be contain'd in a Cask, allow'd to hold 13 $\frac{1}{3}$ Gallons of Water, each 282 solid Inches?

Answer 16 $\frac{1}{2}$ Gallons.

With 13 Gallons of Canary, at 6 s. 8 d. a Gallon, I mingled 20 Gallons of White-Wine at 5 s. a Gallon; and to these added 10 Gallons of Cyder at 3 s. a Gallon, at what Rate must I sell a Quart of this Mixture so as to clear 10 per Cent?

Answer, 16 $\frac{1}{4}$ d.

What Difference will there be to the Proprietors of an Aqueduct between doubling an Expence and halving a Profit?

Answer 4 to 1.

If 100 l. in 12 Years, be allow'd to gain 39 l. 19 s. 8 d. in what Time will any other Sum of Money double itself, by the same Rate of Interest?

Answer, Something more than 30 Years.

What Difference is there between the Interest of 500 l. at 5 $\frac{1}{4}$ Cent. for twelve Years, and the Discompt of the same Sum, at the same Rate, and for the same Time.

Answer 112 l. 10 s. Advantage to the Interest.

Of BILLS of EXCHANGE.

THE Bill of Exchange, in Use among Persons of *Correspondence* and *Dealing*, is a short Order for Money, to be receiv'd in *one Place* or Country, for the Value paid in *another*; to which Men of *Credit*, pay a very strict Honour and Regard. In it are specified: 1. *The Place of the Drawer's Residence*. 2. *The Time of Payment*. 3. *To Whom*. 4. *The Sum*. 5. *Usually at what Rate of Exchange*. 6. *Of whom the Value was receiv'd*, or to whose *Accompt the Draught is to be placed*. 7. *The Drawer's Name*. 8. *By Whom*, and *Where to be paid*.

In Bills of Exchange there are commonly four Persons principally concerned: 1. The *Remitter*, who pays the Value to, 2. The *Drawer*, who receives it in *one Place*, and furnishes him with a Bill upon, 3. The *Acceptant*, who is expected to pay it in due Time, to, 4. The *Possessor* or *Presenter*, who is to receive the Contents in *another Place*; not but, sometimes there are only three Persons concerned in a *Remittance*, and sometimes, though but seldom, *two*.

All *Bills of Exchange*, upon their coming to the *Presenter's* Hands, from the *Remitter*, are immediately to be tender'd to the *Person* on whom they are drawn, for *Acceptance*, which, by legal Appointment, ought to be made in *Writing*, under the Bill.

If a Bill be payable at *Usance*, or *after Date*, the *Acceptant's* subscribing his Name, or making any other Mark on the same, is sufficient and valid *Acceptance*; but if it be payable *after Sight*, the *Day* on which it's tender'd for Acceptation, must be also mentioned upon it; because, upon that depends the *Time of Payment*; by which *Acceptance*, he becomes *absolutely* and *irrevokably* Debtor to the *Presenter*, for the *Contents*; or the *Course of Exchange* would, otherwise, be subject to great Hazards and Uncertainties.

But if the *Party*, to whom a Bill is directed, *refuses* to accept it, after twenty four Hours Deliberation, if it be a *Foreign Bill*, or upon Presentment, if an *Inland Bill*, *Protest* must be made for *Non-Acceptance* at the Place of his Abode, by a *Notary-Publick*, who is to be Witness of that Refusal; which *Protest* should, for the Security of the *Presenter*, be returned the first Post, to the *Remitter*, that he may furnish a new Bill, or take his proper Measures with the Parties concerned.

The *Drawer* of a Bill should always, the same Post, take care to give his *Correspondent* Notice, by Letter, that he has drawn upon him for so much, payable as in the Bill, to prevent its being *Protested*, and sent him back *Non-Accepted*, for want of due *Advice*; for in that Case, his *Correspondent* may refuse to accept, till Advice arrives, if the Bill mentions *Advice* to be expected.

To prevent Interruption of Business by Miscarriage of Letters, or other Accident, *Merchants* always draw *two*, and often *three Outland Bills*, all of the same Tenor and Date, excepting in the *second* against the *first*, and if there be *three* drawn, against the *third* also, and in the *third* against the *first* and *second*, to prevent the *Accepter's* paying

paying more than one of them by *mistake*; which Bills, the *Remitter* takes care to send his *Correspondent*, to whom they are made payable, by different *Posts*, one of which being answer'd, the rest are of no Force.

If an accepted Bill be not paid upon Demand, the very Day it falls due, it must be *Noted*, that is, put into the Hands of a *Notary-Publick*, by the *Presenter*, in order to have a *Protest* drawn up, under a *Copy* of the Bill for *Non-Payment*; which *Protest*, within fourteen Days at farthest, must be returned (but not the Bill itself, unless for special Reasons) to the *Remitter*, who paid the Value, and who is to give Satisfaction for his Concern therein, to the *Presenter*, and who will procure Satisfaction of the *Drawer*; not only with respect to the *Principal Sum*, and the *Interest* thereof, from the Day of *Protest*, but also may recover the *Rechange* of the said Sum, with *Charges* of *Protest*, and whatever *Damages* shall be incurred, by the Default of his *Correspondent*, the *Acceptant*; though *Rechange* is not always insisted on.

The Neglect of *Protest* in due Time, leaves the *Presenter*, or *Possessor* of a Bill no Security, but that of the *Acceptant*; whereas he has otherwise, the *Drawer*, and every one of the *Indorsers*, (if any) besides the *Acceptant* to depend on, for the *Principal* and *Damages*; and if but one of them prove sufficient, he will be no Loser.

No Bill of Exchange can be protested, unless the Value be mentioned therein to be received, and the Person named of whom; nor is it usual among *Dealers*, to note an *Inland Bill* under 20 l. Value, such Bills are commonly returned without *Charges*; not but that it may, after Acceptance, be lawfully done, if the Bill be above 5 l. Value.

If you discount, or pay a Debt with an *Inland Bill*, payable to your Self or Order, you write your Name on the Backside, and deliver it into the Possession of the Person you intend to make it over to, which is called *Indorsing*, whereby you assign all your Property therein to him; and in case of the *Acceptant's* Failure before it's paid, You are, by Virtue thereof, as responsible to such your Assign for the Contents and Damages, upon *Protest* made, as the *Remitter* is to you, and the *Drawer* to him. In like manner, let a Bill be indorsed by several Persons, the *Possessor*, or Person to whom it was last assign'd, in case of *Non-Payment*, causes *Protest* to be made, which being return'd to the last *Indorser*, he is obliged to satisfy the last *Possessor*, as to the Contents and Charges, and returns it, in the same Manner, to the second; he to the third, &c. till at last, it recurs upon the *Drawer*, who is oblig'd to answer all Damages, as before. In the same Manner ought *Promissory Notes* to be treated, they being, in the Eye of the Law, of the Nature of *Inland Bills* of Exchange.

But, on an *Outland Bill*, besides the *Indorser's* Name, it is usual to fill up the *Indorsement*, by appointing Payment to his Order, naming the Person he assigns it over to; specifying the Conditions and Reasons that induced him to make such *Indorsement*, as; Pay Mr. R. W—— or Order, Value in Account. S. S. And if R. W—— should assign it to another; Pay Mr. P. D—— or Order, Value of himself. R. W—— remembring always, that unless the Word Order be inserted, no Bill of Exchange, or *Promissory Note*, is indorsible to another.

If the *Acceptant* of a Bill should chance to fail, between the Time of Acceptance, and that of Payment; *Protest* may be made, in that Case, for better Security, before the Bill becomes due; not but, by the good Understanding among *Dealers*, the Damages, as *Brokerage*, *Interest*, &c. that would follow *Protest*, are frequently prevented, especially

especially if the *Drawer*, or any of the *Indorsers* be sufficient Persons; for any of their *Correspondents*, out of Respect, may *Re-accept* the Bill, for Honour of the *Drawer*, or *Indorser*, if apply'd to, by the *Possessor*, after he has, for Security of the *Re-acceptor*, caused the Bill to be *protested*, with a Declaration, that the Bill was re-accepted for Honour of the *Drawer*, &c. underwriting it, *Accepted, for Honour of the Drawer, & L. L.* Or, if the Respect was shewn to an *Indorser*; *Accepted, for Honour of the Indorser, W. W. & L. L.* In the same Manner are to be serv'd such Bills as are drawn upon a Person, who has not equivalent Effects of the *Drawer's* in his Hands, or that has not receiv'd *due Advice* of the Bill presented to him for *Acceptance*; which entitles him to a legal Claim upon the *Drawer*, if he thinks he may venture, under those Circumstances, to honour his Bill.

When these *Bills, accepted under Protest*, become due, 'tis the Custom of Merchants to have a *second* Protest for *Non-payment*, made by the *Possessor*, with a Declaration, as before, that the *Re-acceptor* did pay the same, with Charges, for Honour as before said; which *Protests*, the *Re-acceptant*, for his own Security, will take Care to return, with the first Opportunity, to his *Friend* and *Correspondent*, in whose Favour he advanced the Money.

Protest for better Security may also be made, if the *Acceptant* be under an *ill Repute*; upon which, if he give *Security* for the Payment of the Bill in due Time, the *Security* becomes responsible, as well as the *Drawer*, should the *Acceptant* prove insolvent.

The *Usance*, or *Usage of Merchants*, with respect to *Foreign Bills of Exchange*, to and from *London* to *Rotterdam*, *Antwerp*, or any Part of the *Low Countries*, is one *Kalendar Month*, after the Date of the Bill; double *Usance*, two Months, &c. *Usance* from *Hamburg*, *Copenhagen*, *Stockholm*, *Lubeck*, *Strasburgh* to *London*, and *Contra* is also one Month; though Bills from those, and other distant Places, are commonly drawn payable *after Sight*, because of the Uncertainty of their Arrival. *Usance* from *London* to *Lisbon* or *Madrid*, is two Months; to *Leghorn*, *Venice*, or any Part of the *Levant*, is three Months, and *Contra*.

In computing the Time, when a *Foreign Bill*, payable at *Usance*, becomes due, Respect is to be had to the *Stile* of the Country in which the same was drawn; they who make Use of the *New Stile*, being eleven Days, at present, in Account, before those who adhere to the *Old*.

The *Old Stile* is used no where but in *Great Britain* and *Ireland*, and in the Protestant Cantons of *Switzerland*; the rest of *Europe*, that is *Christian*, make use of the *New Stile*, as appointed by Pope Gregory XIII. who reformed the *Julian Kalendar*, which before that Time was generally used.

After Bills of Exchange become due, whether *Inland* or *Foreign*, payable at *Sight* or *otherwise*, there are, by Custom of Merchants, certain *Days of Grace* allow'd the *Acceptor*, over and above the Time prescribed by the Bill, which are more or less, according to the Usage of the Country wherein they are to be paid; as in *Rotterdam* they allow three Days; *Rouen*, five; *Paris*, ten; *Hamburg*, twelve; *Antwerp* and *Madrid*, fourteen; and *London* always three: And on the *third Day*, before Sun-set, *Payment* must be demanded on the Part of the *Presenter*; and if not complied with, the Bill must that very Day (being the utmost Time allow'd by the Law for that Purpose) be *Noted*, in order to be *Protested for Non-Payment*.

If a Bill fall due on a *Sunday*, or other great *Holiday*, it is to be demanded and paid, or protested, the *Day before*.

R E C R E A T I O N X.

IF by selling Hops at 3*l.* 10*s.* ¶ Cwt. the Planter clears 30 ¶ Cent. what was his Gain ¶ Cent. when the same Goods sold at 4*l.* and a Crown?

Answer 57 *l.* 17 *s.* 1 $\frac{1}{2}$ *d.* \sim 1 $\frac{1}{2}$

If by remitting to *Holland*, at 31 *s.* 9 *d.* *Flem.* ¶ Pound Sterling, 5 ¶ Cent. is gained: How goes the Exchange, when by Remittance, I clear 10 ¶ Cent?

Answer 33 *s.* 3 $\frac{1}{2}$ *d.*

If, when Port-Wine is 17 Guineas the Hoghead, a Company of 45 People will spend 20*l.* therein, in a certain Time; what is Wine a Pipe, when 13 Persons more, will spend 63*l.* in twice the Time, drinking with equal Moderation?

Answer 43 *l.* 12 *s.* 6 *d.*

I am dispatch'd on a Commission from *London* to *Edinburgh*, distant by Computation, say 350 Miles, and my Rout is settled at 22 Miles a Day: You, 4 Days after, are sent after me with fresh Orders, and are to travel 32 Miles a Day; whereabouts on the Road shall I be overtaken by you?

Answer 68 $\frac{1}{2}$ Miles on this Side *Edinburgh*.

The Net Proceeds of a Hhd. of *Barbadoes* Sugar, were 4*l.* 14 *s.* 6 *d.* the Custom and Fees, 2*l.* 8 *s.* 6 *d.* Freight, 22 *s.* 8 *d.* Factorage, 4 *s.* 6 *d.* The Gross-weight, was Cwt. 9. 94 *lb.* Tare, 1 in 10; pray then how was the Sugar rated in the Bill of Parcels?

Answer 19 *s.* 2 $\frac{1}{2}$ *d.* ¶ Cwt. nearly.

Sold a repeating Watch for 50 Guineas, and by so doing, lost 17 ¶ Cent. whereas I ought, in Dealing, to have cleared 20 ¶ Cent. then how much was it sold under the just Value?

Answer 23 *l.* 8 *s.* 0 $\frac{7}{8}$ *d.*

If 6 *lb.* of Pepper be worth 13 *lb.* of Ginger, and 19 *lb.* of this be worth 4 $\frac{1}{2}$ *lb.* of Cloves, and 10 *lb.* of Cloves, be equivalent to 63 *lb.* of Sugar, at 5 *d.* ¶ Pound; what is the Value of Cwt. of Pepper?

Answer 7 *l.* 2 *s.* 5 $\frac{137}{220}$ *d.*

If by sending Pewter to *Turkey*, and parting with it at 25 $\frac{2}{3}$ *d.* ¶ Pound, the Merchant clears Cent. ¶ Cent. what does he clear in *Holland*, where he disposes of the Cwt. for 8*l.*

Answer 2 *l.* 0 *s.* 2 $\frac{2}{3}$ *d.*

If 30 Men can perform a Piece of Work in 11 Days, how many will accomplish another, 4 times as big, in one fifth of the Time?

Answer 600.

A *May-Pole*, 50 Foot 11 Inches long, at a certain time of Day, will cast a Shadow 98 Foot 6 Inches long: I would hereby find the Breadth of a River, that running within 20 Foot 6 Inches of the Foot of a Steeple, 300 Foot 8 Inches high, will, at the same Time, throw the Extremity of its Shadow 30 Foot 9 Inches beyond the Stream.

Answer 530 Foot, 5 Inches nearly.

Inland BILLS of EXCHANGE.

Worcester, April 15. 174

l. 64 . 0 . 0Payable at
Sight.

At Sight pay Mr. *William Nichols*, or Order, the Sum of sixty-four Pounds, the Value receiv'd of Captain *John Anderson*, and place it to Accompt, as ϕ Advice from
To Mr. *Michael Hale*, at the
Red Lion, Smithfield, London.

Edmund Dealmuch.

Sir,

Greenwich, May 10. 174

l. 13 . 10 . 0

At Sight, pay Mr. *Godfrey Langham*, the Sum of thirteen Pounds ten Shillings, out of my growing Substinance, Value of *Ditto*, and place it without further Advice, to Accompt of,
Your humble Servant,

To Mr. *Jeoffry Ransford*, Agent at the
Horse-Guards, *White-Hall, London.*

Miles Cornet.

London, June 2. 174

l. 162 . 8 . 0Payable after
Sight.

At twelve Days Sight, pay Mr. *Andrew Aldridge*, or Order, the Sum of one hundred sixty-two Pounds eight Shillings, for the Value receiv'd of *Thomas Jones, Esq;* and place it to Accompt, as ϕ Advice from,
Yours,
To Mr. *Thomas Wells*,
Clothier, *Shrewsbury.*

Alex. Countwell.

Sir,

Norwich, June 9. 174

l. 42 . 15 . 0

At six Days Sight, pay Mr. *Jeremiah Snow*, or Order, forty-two Pounds fifteen Shillings, Value of himself, and place it, without farther Advice, to Accompt of,
To Mr. *John Sherman*,
Cheese-Factor, *Chester.*

Samuel Pryor.

H

Sir

Inland BILLS of EXCHANGE.

Sir,

Salisbury, July 14. 174

l. 8 . 8 . 6

Payable af- Twenty Days after Date, pay *William Crofts*, eight Pound eight and six Pence, Value receiv'd of
 ter Date. the Right Honourable the Lady *Northall*, and place it, as by Advice from,
 To Alderman *Jos. Pitts*, Yours,

Exon.

Benjamin Busy.

Bristol, July 31. 174 .

l. 300 . 0 . 0

Two Months after Date, pay Mr. *Luke Loudwater*, or Order, three hundred Pounds, Value
 receiv'd of *George Granby*, Esq; and place it to Accompt, as by Advice from,

To Mr. *Oliver Madders*, at the
Bull, Breadstreet, London.

Titus Timely.

Edinburgh, Oct. 4. 174 .

l. 50 . 0 . 0

The first of November next, pay Sir *William Methwold*, or Order, fifty Pounds Sterling, Value in
 ourselves, and place it without more Advice to Accompt of,

To Sir *John Paterfon*,
Lime-street, London.

Jonath. and David Brun.

N. B. If Sir *William* sends his Servant *Valentine Lively*, to receive this Bill, after he has indorsed
 it, which is his Order, the Servant may write over it;

Receiv'd, Nov. 4. 174 . the Contents,

l. 50 . 0 . 0

William Methwold.
 Witness, Val. Lively.

Or only witnessing it will serve; and so of any other.

Men

Inland BILLS of EXCHANGE.

59

Men of great Business seldom trouble themselves with Receipts and Payments of Cash, but give an Order on their Banker, thus :

Mess. Norman and Fox,	London, Nov. 4. 174	<div style="border-top: 1px solid black; border-bottom: 3px double black; padding: 2px 0;">1, 50 . — . —</div>
Payable to Bearer.	Pay Sir William Methwold, or Bearer, fifty Pounds on Accompt of,	John Paterfon.
	Another	
Mr. Mead,	Pay Mr. Thomas Morgan, or Bearer, one hundred and seventeen Pounds three and three Pence, on Demand, and place it to my Accompt, To Mr. Mead, Fleet-street, London.	<div style="text-align: right;">Tunbridge, July 30. 174</div> <div style="text-align: right;">Arlington.</div>

Lancelot Yeoman,	Leith, Aug. 2. 174	<div style="border-top: 1px solid black; border-bottom: 3px double black; padding: 2px 0;">l. 150 . 0 . 0</div>
A Gentleman's Order on a Tenant.	The second of November next, pay Hercules Horsfemi, or Bearer, one hundred and fifty Pounds Scots, out of your Michaelmas half Year's Rent, make good Payment, expecting no farther Advice, the Value receiv'd of him, by To Lancelot Yeoman, in the Lordship of Killdrummy, Aberdeenshire.	<div style="text-align: right;">Your Friend,</div> <div style="text-align: right;">Killdrummy.</div>

Of Foreign BILLS of EXCHANGE.

Foreign Cities, drawing Bills of Exchange upon London, always mention the *Rate of Exchange*, because they draw in *their own Money*; but when Bills are drawn by London on *Foreign Cities*, in *their Money*, the *Rate of Exchange* is not mention'd, that being a particular Agreement between the *Remitter* and the *Drawer*, which concerns not the *Acceptant*, nor the *Receiver*, but they run absolutely for so many *Pieces*, or so much of their *Current Money*; except in *Holland*, in which Case the *Sum* is first prescrib'd in *Sterl.* and then at what *Rate of Exchange*.

Foreign BILLS of EXCHANGE.

London, June 10. 174 for Crowns 612, at Usance.

London on At Usance, pay this first of Exchange, to Col. *John Ward*, or Order, six hundred and twelve
Calais. Crowns, for the Value here receiv'd of the Right Honourable *Charles Earl of Wrexham*, and place
First Bill. it to Accompt, as pp Advice from,
To Mr. *Moses Mayhew*,
Merchant, in Calais. Godfrey and Gower.

London, June 10. 174 for Crowns 612, at Usance.

Second Bill. At Usance, pay this my second of Exchange, my first not paid, to Col. *John Ward*, or Order, six
hundred and twelve Crowns, for the Value here receiv'd of the Right Honourable *Charles Earl of*
Wrexham, and place it to Accompt, as by Advice from,
To Mr. *Moses Mayhew*,
Merchant, in Calais. Godfrey and Gower.

Paris, July 3. 174 for Crowns 150, at 31 $\frac{1}{2}$ d. 2 Usance.

Paris on At double Usance, pay this first of Exchange to Mr. *Richard Rich*, or Order, the Sum of one hun-
London. dred and fifty Crowns, at thirty one Pence half Penny pp Crown, Value of Mr. *David Le Petre*, and
First Bill. pass it to Accompt, as pp Advice,
To Mr. *Paul Puttoff*,
London. Frederick Farfetch.

Paris, July 3. 174 for Crowns 150, at 31 $\frac{1}{2}$ d. 2 Usance.

Second Bill. At double Usance, pay this second of Exchange, my first not paid, to Mr. *Richard Rich*, or Order,
the Sum of one hundred and fifty Crowns, at thirty one Pence half Penny pp Crown, Value of Mr.
David Le Petre, and pass it to Accompt, as pp Advice,
To Mr. *Paul Puttoff*,
London. Frederick Farfetch.

The

The PROTEST of the abovesaid Foreign BILL, for Non-Acceptance.

Paris, July 3. 174 for Crowns 150, at $31\frac{1}{2}$ d. 2 Usance.

At double Usance, pay this first of Exchange to Mr. Richard Rich, or Order, the Sum of one hundred and fifty Crowns, at thirty one Pence half Penny ¶ Crown, Value of Mr. David Le Petre, and pass it to Accompt, as ¶ Advice,
To Mr. Paul Puttoff,
London.

Frederick Farfetch.

ON the second Day of August, one thousand seven hundred and forty British Stile, at
the Instance and Request of Mr. Richard Rich of London, Merchant, I Jonas Useful, Publick-Notary, sworn and admitted by Royal Authority, did go to the Dwelling-House of Mr. Paul Puttoff, upon whom the above Bill of Exchange is drawn; and shew'd the Original unto the said Paul Puttoff, demanding his Acceptance of the same, who answer'd me he would not accept the said Bill, for Reasons best known to himself, of which, should inform the Drawer, Mr. Frederick Farfetch: Wherefore, I the said Notary did protest, and by these Presents, do solemnly protest, as well against Frederick Farfetch, as against the said Paul Puttoff, as also against all other Persons, Indorsers, and all others Concern'd, for all Changes, Rechanges, Damages and Interests, already suffered and sustained, or to be suffer'd and sustain'd, for want of due Acceptance of the said Bill: Thus done and protested, at my Office in London aforesaid, in Presence of A. B. and C. D. Witnesses hereunto required.

Quod attester rogatus,

Jonas Useful, Notary-Publick.

London

Foreign BILLS of EXCHANGE.

London, Aug. 9. 174 for 395 l. Sterl. at 34 s. 8 d. Flem. ₤ l. Sterl. at Usance.

London on At Usance, pay this first of Exchange, to *Jacob Vanderladen*, or Order, three hundred ninety-five Pounds Sterl. at thirty-four Shillings eight Pence, *Flem. ₤ Pound Sterl.* Value of *James Moreton*, Esq; and place it, as ₤ Advice from,
First Bill. To Mr. *Edward Towers*,
 Merchant, *Rotterdam.* Yours, *Edward Eaton.*

London, Aug. 9. 174 for 395 l. Sterl. 34 s. 8 d. Flem. ₤ l. Sterl. at Usance.

Second Bill. At Usance, pay this my second of Exchange, my first not paid, to *Jacob Vanderladen*, or Order, three hundred ninety-five Pounds Sterl. at thirty-four and eight Pence, *Flem. ₤ Pound Sterl.* Value of *James Moreton*, Esq; and place it as ₤ Advice from,
 To Mr. *Edward Towers*,
 Merchant, *Rotterdam.* Yours, *Edward Eaton.*

Bruxelles, Sept. 24. 174 for 1197 l. 8 s. 6 d. Sterl. 2 Usance.

Brussels on At double Usance, pay this first of Exchange, to Mr. *Philip Faro*, or Order, the Sum of one thousand one hundred ninety-seven Pounds, eight Shillings six Pence Sterl. the Value of *Ditto*, and
London. place it to Accompt, as ₤ Advice from,
Ready To Mr. *Gaspar Elbe*,
changed. Merchant, *London.* Your humble Servant, *Bertrand Vanhove.*

Bruxelles, Sept. 24. 174 for 1197 l. 8 s. 6 d. Sterl. 2 Usance.

Second Bill. At double Usance, pay this second of Exchange, my first not paid, to Mr. *Philip Faro*, or Order, the Sum of one thousand one hundred ninety-seven Pounds, eight Shillings six Pence Sterl. the Value of *Ditto*, and place it to Accompt, as ₤ Advice from,
 To Mr. *Gaspar Elbe*,
 Merchant, *London.* Your humble Servant, *Bertrand Vanhove.*

London,

RECREATION.

63

London, April 19. 174 . for Dollars 1000 effective, at 3 Months.

London on At three Months, pay this my first of Exchange, to Mr. Peter Peterary, or Order, Dollars one
 Alicant. thousand effective, the Value receiv'd of *Andreas Amandretia*, and pass it to Accompt, as ~~of~~ Advice.
 First Bill. To Mr. Giles Goodpay, Pay as above,
 Merchant, in Alicant. Edmund English.

Let the Scholar constantly draw second, and sometimes third Bills, according to former Directions and Examples.

RECREATION XI.

A Tradesman increas'd his Estate annually a third Part, abating 100 *l.* which he spent in his Family, and at the End of $3\frac{1}{4}$ Years found that his Estate amounted to 3179 *l.* 11 *s.* 8 *d.* Pray what had he at outsetting? *£ 141*
 Answer 1480 *l.*

A. and B. paid equally for a Horse, Feb. 7. 1740. A. on the 10th, took him a Journey into the West, and return'd on the 10th of June following; B. on the 2d of Aug. took him into Scotland, and stayed 'till Nov. 13. and this concluded his Service this Year. From Jan. 17. following, A. used him ten Days, and, in six Weeks after his return, employ'd him 'till Apr. 30. B. then rid him from May-day to Midsummer. A. had him from the 14th of July, to fourteen Days after St. James's-tide; B. on Sept. 30. took him into Norfolk, and came back Oct. 19. He then was sold for 7 *l.* 10 *s.* and they would have the Money parted equitably between them, viz. in Proportion to the Use each made of their Steed?

Answer A. 3 *l.* 8 *s.* 3 $\frac{17}{101}$ *d.* B. 4 *l.* 1 *s.* 8 $\frac{20}{101}$ *d.*

An Accomptant told a Gentleman, who had constantly eight Persons at his Table, that he would gladly make a ninth, and was willing to give 200 Guineas for his Board, so long as he could place the said Company at Dinner, differently from any one Day before; this being accepted, what did his Entertainment cost him a Year?

Answer 50 *d.* and about $\frac{2}{3}$.

Part 1500 Acres of Land, give B. 72 more than A. and C. 112 more than B.

Answer A. 414 $\frac{2}{3}$. B. 486 $\frac{2}{3}$. C. 598 $\frac{2}{3}$.

A. can do a Piece of Work in 10 Days, *B.* alone in 13; set them both about it together, in what Time will it be finish'd?

Answer $5\frac{1}{2}$ Days.

B. and *C.* together can build a Boat in 18 Days, with the Assistance of *A.* they can do it in 11 days: In what time would *A.* do it by himself?

Answer $28\frac{2}{7}$ Days.

Divide 1000 Crowns, give *A.* 129 more than *B.* and *B.* 178 fewer than *C.*

Answer *A.* 360. *B.* 231. *C.* 409.

Part 250 *l.* give *A.* 37 more than *B.* and let *C.* have 28 fewer?

Answer *A.* 117 $\frac{1}{3}$. *B.* 80 $\frac{1}{3}$. *C.* 52 $\frac{1}{3}$.

A Father divided his Fortune among his Sons, giving *A.* 7, as often as *B.* 4; to *C.* he gave as often 2, as *B.* 5. and yet the Dividend of *C.* came to 2166 $\frac{1}{3}$ *l.*; what was the Value of the whole Legacy?

Answer 17060 *l.* 4 *s.* 0 $\frac{3}{4}$ *d.*

A Stationer sold Quills at 11 *s.* $\frac{1}{2}$ Thousand, by which he clear'd $\frac{1}{4}$ of the Money; but growing scarce, raised them to 13 *s.* 6 *d.* $\frac{1}{2}$ Thousand; what might he clear $\frac{1}{4}$ Cent. by the latter Price?

Answer 96 *l.* 7 *s.* 3 $\frac{1}{4}$ *d.*

In what time will the Interest of 49 *l.* 3 *s.* equal the Proceed of 19 *l.* 6 *s.* at Use 47 Days, at any Rate of Interest?

Answer 18 $\frac{4}{5}$ Days.

A Person was possessed of a $\frac{1}{3}$ Share of a Copper-Mine, and sold $\frac{2}{3}$ of his Interest therein, for 1710 *l.* what was the reputed Value of the whole Property at the same Rate?

Answer 3800 *l.*

What Money at 3 $\frac{1}{2}$ Cent. will clear 38 *l.* 10 *s.* in a Year and Quarter's Time?

Answer 880 *l.*

X. Y. Z. can, working together, complete a Stair-case in 12 Days, *Z.* is Man enough to do it alone in 24 Days, and *X.* in 34: In what time then cou'd *Y* get it done himself?

Answer 79 $\frac{7}{13}$.

What Number is that, to which, if $\frac{3}{10}$ of $\frac{1}{2}$ of $\frac{1}{4}$ be added, the Total will be 1?

Answer $\frac{394}{125}$.

A Father dying, left his Son a Fortune, $\frac{1}{3}$ of which he ran through in six Months; $\frac{2}{3}$ of the Remainder held him a twelve Month longer, at which time he had bare 348 *l.* left: Pray what did his Father bequeath him?

Answer 1284 *l.* 18 *s.* 5 $\frac{1}{2}$ *d.*

A FACTOR'S Remittance to his Employer.

Venice, Jan. 10. 174 . for Ducats 187. 10 Banco, at 56½ d. At Usance.

Venice on At Usance, pay this my first of Exchange, to the Right Worshipful Sir *William Goring*, or Order,
London. one hundred eighty seven Ducats, ten gros Banco, at fifty six Pence half Penny $\frac{1}{2}$ Ducat, Value in
 Ourselves, and place it as $\frac{1}{2}$ Advice,
 To *Nath. Gould, Esq;*
London.

Jones and Lumley.

[A Ducat is 24 Gros Banco.]

London, Octob. 12. 174 . for 700 Ps. of $\frac{3}{8}$ Mex. at 3 Months.

London on Three Months after Date, pay ~~this my first of Exchange, to Mr. Andrew la Garde, or Order, seven~~
Leghorn. hundred *Mexico* Pieces of $\frac{3}{8}$, for ~~the Value receiv'd of himself, and place it to Accompt, as $\frac{1}{2}$ Advice~~
 from,
 To *Mr. John Horsey,*
 Merchant, in *Leghorn.*

Lawrence Quinto.

Sir,

Lucca, Sept. 13. 174 . for 13l. 11s. 8d.

Lucca on At Sight, pay this my only Bill of Exchange, to *Simon Tostain* Merchant, or Order, the Sum
London. of thirteen Pounds, eleven Shillings and eight Pence Sterl. Value of *Dirto*, and place it to Accompt,
 Ready as $\frac{1}{2}$ Advice,
 changed. To *Mr. Thomas Gilder,*
 Banker, in *London.*

Pierre de la Roche.

Foreign BILLS of EXCHANGE.

Genoa, April 28. 174 . for Crowns 500, at 65 d. Sterl.

Genoa on At thirty Days Sight, pay this first of Exchange to Seignior *Francisco Spavini*, or Order, five hundred
London. Crowns, Exchange at sixty five Pence $\frac{1}{2}$ Crown. Value receiv'd of the Lords of Regency, and place it
 to Account of Mr. *Jacques-Baudin* of Lyons, as $\frac{1}{2}$ Advice from him,
 To Mr. *Robert French*, Banker,
Lombard-Street, London. *Gervasi Orbitello.*

**Monfieur Baudin's LETTER, advising his Concurrence to the
 abovesaid Draught.**

Sir,

Brother *Orbitello* of *Genoa*, has this Day desired me to furnish him 500 Crowns, payable to the
 Resident of the States at *London*, I have therefore order'd him to draw for the said Sum on you, which
 please to honour as usual, and put it to the Account of,

To Mr. *Robert French*,
 Banker, *London.*

Lyons, May 3. 174 . N. S.

Your Friend and Servant,

Jacq. Baudin.

Lisbon, Feb. 7. 174 . for 181 M. 186 Rees. Ex^a. at 64 $\frac{1}{2}$ d. $\frac{1}{2}$ M.

Lisbon on At Usance, pay this my first of Exchange, to Don *Pedro Olivarez*, or Order, the Sum of one
London. hundred eighty one M. and one hundred eighty six Rees, at sixty four Pence half Penny $\frac{1}{2}$ Millree,
 Value in Accompt, and place it to Mess. *Boulet* and *Savary* of *Nismes*, as $\frac{1}{2}$ Advice from them,
 To Mr. *Mark Gaffer*,
 on *Tower Hill, London.* *Bertrand Alberoni.*

A DRAUGHT on the Imployer, for Value of Goods ship'd him
per Factor.

Sir,

St. Andrews, July 15. 174 . Millrees 300, at Usance.

N. Britain At Usauce, pay this my first of Exchange, to Mr. *Elias Regnaud*, or Order, three hundred
on Lisbon. Millrees, the Value here ship'd for your Use, upon the *Santa Maria* of *Naples*, and consign'd, as
Advice from,

To Seignior *Santilena*,
at *Lisbon*.

Your very humble Servant,

Melvin Gordon.

An Imployer's LETTER, with REMITTANCE, to his Factor in
Bill of the said Factor's Correspondent.

Mr. *James Dennis*,

According to your Desire, I have remitted you 1000 Crowns for my Accompt, in your Correspondent *Aubin's* Bill inclos'd, payable by, and to yourself, for which please to give me Credit: I recommend the Contents of my last, of the 2d Current to you, and rest,

Your Friend and humble Servant,

Paris, Aug. 18. 174 .

Estienne Benoit.

Paris, Aug. 18. 174 . for Crowns 1000, at 58 d. $\frac{1}{2}$ Crown.

The Bill. At double Usance, pay this my only Bill of Exchange, to yourself, the Sum of one thousand Crowns, Exchange at thirty-two Pence Sterl. $\frac{1}{2}$ Crown, the Value receiv'd of Monsieur *Estienne Benoit*, and place it as Advice, to Accompt of,
To Mr. *James Denis*,
Merchant, in *Bristol*.

Aubin.

Foreign BILLS of EXCHANGE.

The Correspondent's LETTER of Advice.

Mr. James Denis,

Paris, Aug. 18. 174 3

Sir,

By this Post I have drawn on you 1000 Crowns, at 32 *d.* payable to yourself, Value of Monsieur *Estienne Benoit*, which with my other Bills depending, please to honour, and the timely Remittances shall be punctually made you by,

To Mr. James Denis,
Merchant, Bristol.

Sir,

Your very humble Servant,

Aubin.

The following BILL is useful between two Persons, when an Opportunity of Drawing is expected to present, or when a Sum of Money owing is dubious.

London, Nov. 3. 174 . for 3000 M. at 2 *Usance*.

London on
Oporto.

At double *Usance*, pay this my first of Exchange to myself, or Order, the Sum of three thousand Millrees, Value in your Hands, and place it to Accompt, as d^{r} Advice from,
To Edward Rowe, Esq; *English*
Consul, at Oporto.

William Eaton.

If the first Bill be accepted, Eaton, upon Advice, sends a second of the same Import, indors'd to his Order, which ought to be paid by Rowe, pursuant to his Acceptance of the first; if it be not accepted, drawing in this Manner prevents all the Damages of Protest, and the Inconveniencies that would follow from other Persons being concern'd therein.

A

RECREATION.

69

A LETTER of Advice with a BILL to a Factor.

Mr. Richard Stewart,

Norwich, Aug. 11. 174 .

Yours of the 29th past receiv'd with the inclos'd Accompt; the Balance whereof rises higher than expected. This Day have ship'd you by the *Peterborough* of *Milford*, *James Snape*, Master, 13 Bales of Goods against the Fair, and have taken this Opportunity to enclose you a Bill on self, for my Balance, for which, on Sales of said Consignment, be pleas'd to credit

To Mr. Richard Stewart,
Bristol.

Your Friend and Servant,
Abr. Anstruther.

Norwich, Aug. 11. 174 . 142 l. 10 s.

The Bill.

At your Fair in *September* next, pay this my only Bill of Exchange to yourself, one hundred forty two Pounds ten Shillings, out of the Proceed of Goods, this Day consign'd you for my Accompt, in the *Peterborough* of *Milford*, as d^{d} Advice from,

To Mr. Richard Stewart,
Bristol.

Your Friend,
Abr. Anstruther.

RECREATION XII.

A Grocer wou'd mix a Quantity of Sugar at 10 *d.* d^{d} Pound, with other Sugars at 7 $\frac{1}{2}$ *d.* 5 *d.* and 4 $\frac{1}{2}$ *d.* d^{d} Pound, intending to make up a Commodity worth 6 *d.* d^{d} Pound: In what Proportions is he to take of those Sugars?

Answer. When the Quantity is undetermin'd, as many Answers may be produced, as there are different Ways of linking together a larger and a less, than the middle or mean Rate propos'd.

A Younger Brother receiv'd 2200 *l.* which was just $\frac{1}{2}$ of his elder Brother's Fortune; and 3 and $\frac{1}{2}$ times the Elder's Money was $\frac{1}{2}$ as much again as the Father was worth: What was that?

Answer 11000 *l.*

A

RECREATION.

A Person making his Will, gave to one Child $\frac{1}{10}$ of his Estate, to another $\frac{1}{10}$, and when these Legacies came to be paid, one turn'd out 540*l.* 10*s.* more than the other: What did the Testator die worth?

Answer 1538*l.* 13*s.* nearly.

A Father devis'd $\frac{3}{4}$ of his Estate to one of his Sons, and $\frac{1}{4}$ of the Residue to another, and the Surplus to his Relict for her Life; the Children's Legacies were found to be 257*l.* 3*s.* 4*d.* different: Pray what Money did he leave the Widow the Use of?

Answer 534*l.* 2*s.* 8*d.* nearly.

What Number is that, from which, if you deduct the $\frac{1}{3}$ of $\frac{7}{8}$, and to the Remainder add $\frac{1}{8}$ of $\frac{4}{9}$, the Sum will be 3?

Answer 2 $\frac{662}{768}$.

A Lad having got 4000 Nuts, in his Return was met by Mad-Tom, who took from him $\frac{1}{3}$ of $\frac{2}{3}$ of his whole Stock: Raving-Ned light on him afterward, and forced $\frac{2}{3}$ of $\frac{1}{3}$ of the Remainder from him: Unluckily Positive-Jack found him, and required $\frac{1}{6}$ of $\frac{1}{12}$ of what he had left: Smiling-Dolly was by promise to have $\frac{1}{4}$ of a Quarter of what Nuts he brought home: How many then had the Boy left?

Answer 575 $\frac{5}{8}$.

Bought 100 Quarters of Malt, Meal and Oatmeal, together for 142*l.* For every 5 Bushels of Malt I had 3 of Meal, and for every 8 of Meal I had 7 of Oatmeal: Pray what did these cost me severally a Bushel, the Malt being half as dear again as the Meal, and the Meal double the Price of the Oatmeal?

Answer Malt 4*s.* 9 $\frac{720}{1312}$ *d.* Meal 3*s.* 2 $\frac{480}{1312}$ *d.* Oatmeal 1*s.* 7 $\frac{240}{1312}$ *d.*

There is a Number, which, if divided by $\frac{1}{3}$ of $\frac{3}{8}$, will quote $\frac{361}{37}$: Pray what is the Square of that Number?

Answer 95 $\frac{266}{1369}$.

There is a Number, which, if multiplied by $\frac{1}{4}$ of $\frac{7}{8}$ of 2 $\frac{1}{4}$, will produce no more than 1: What is the Cube of that Number?

Answer $\frac{221128}{11681797}$.

What Number is that, to which if you add $\frac{1}{11}$ of 12, more $\frac{1}{19}$ of 27, and from the Total, subtract $\frac{1}{3}$ of 7 $\frac{1}{2}$, less $\frac{1}{3}$ of 1 $\frac{1}{4}$, the Remainder shall be 8?

Answer 9 $\frac{1403}{1616}$.

In raising a joint Stock of 400*l.* A. advanced $\frac{1}{4}$; B. $\frac{1}{12}$ of $\frac{1}{3}$; C. $\frac{1}{6}$ more the Difference between A's Adventure and B's, and D. the rest of the Money: What did every one subscribe?

Answer A. 123 $\frac{523}{6864}$ *l.* B. 163 $\frac{4168}{6864}$ *l.* C. 107 $\frac{1112}{6864}$ *l.* D. 6 $\frac{416}{6864}$ *l.*

A Person dying, left his Wife with Child, and making his Will, order'd, that if she went with a Son, $\frac{2}{3}$ of the Estate should belong to him, and the Remainder to his Mother; and if she went with a Daughter, he appointed the Mother $\frac{2}{3}$, and the Girl $\frac{1}{3}$: But it happen'd that she was deliver'd both of a Son and Daughter; by which she lost in Equity 2000*l.* more than if it had been only a Girl: What would have been her Dowry had she only had a Son?

Answer 1750*l.*

LETTERS

LETTERS OF CREDIT.

Sir,

London, May 11. 174

Please to furnish the Bearer hereof, Mr. *Matthew Meanwell*, the Sum of twenty Pounds, as he shall require the same, and place it to my Accompt, for which, this Letter of Credit, with his Receipt, shall be your sufficient Voucher and Warrant, giving upon Payment, a Line or two of Advice, to

To Mr. *Nich. Neverfail*,
Merchant, in *Hull*.

Your real Friend,

Samuel Standfast.

The Receipt. Receiv'd June 2. 174 of Mr. *Nich. Neverfail*, the Sum of twenty Pounds, by Virtue of Mr. *Samuel Standfast's* Letter of Credit, of May 11. last, for the said Sum,

20 l.⌘ *Matthew Meanwell.*

Sir,

London, Jan. 17. 174

Please to furnish the Bearer, Mr. *Jacques Bernaudin*, the Sum of three hundred Pounds *Sterl.* Exchange, at 33 s. 4 d. *Flem.* ⌘ Pound *Sterl.* to employ for my Accompt; for which Sum, or any Part thereof, take his Bills on me, as ⌘ Advice from,

To Mr. *Claude Crespigny*,
Merchant, in *Antwerp*.

Your humble Servant,

*Kendrick Keptouch.*Ex^o. 300 l. *Sterl.* *Antwerp*, March 10. 174*The Bill.*

At Sight, pay this my only Bill of Exchange, to Mr. *Claude Crespigny*, or Order, the Sum of three hundred Pounds *Sterl.* the Value here received of him, for your Use, and place it, as ⌘ Advice, to the Accompt of,

To the Worshipful *Kendrick Keptouch*, Esq;
in *Mark-Lane*, *London*.

Your humble Servant,

Jac. Bernaudin.

An

LETTERS of CREDIT.

An Indorsement or Assignment of the said BILL to another.

Pay *Israel Falgate*, or Order, Value in Accompt,

Claude Crespigny,

This Bill, drawn upon Receipt of the Sum mentioned, by the Factor Bernaudin, upon the Employer Keptouch, and indorsed by the Presenter Crespigny, to Falgate, for Reasons between themselves, is payable, like other indorsed Notes, to any Bearer, who shall Witness the Payment, by writing his Name under that of the Indorser: Not but Merchants, to prevent Impositions by Forgeries, require Foreign Bills, in dubious Cases, to be sign'd by some substantial Person in London, by way of Attestation, that the Bill presented is genuine; upon Credit whereof, they will venture to accept or pay it.

Sir,

Dublin, Jan. 21. 174

The Bearer, Mr. *Richard Avery*, will have occasion for fifty Pounds, which Sum, I desire you to furnish him, and take his Bill for said Sum, or any Part thereof, on the Honourable *Quintilian*

Quickfight, Esq; I am,
To *Henry Hoare*, Esq;
Fleet-street, London.

Sir,

Your most humble Servant,
Roger Renolds.

Sir,

Ex^o 56 l. London, Feb. 14. 174

The Bill.

At one and twenty Days Sight, pay this my first of Exchange, to *Henry Hoare*, Esq; or Order, the Sum of fifty-six Pounds, the Value receiv'd of *Ditto*, for your Use, as d^{d} Advice from,

To the Honourable *Quintilian*
Quickfight, Esq; Dublin.

Sir,

Your humble Servant,
Richard Avery.

In the Bill, the then current Exchange, suppose 12 l. d^{d} Cent. is to be added to the Sum, ordered in the Letter of Credit, which sent indors'd to Renolds, with these Words:

Pay Mr. *Roger Renolds*, or Order, Value in Accompt,

Henry Hoare.
And

And if Renolds should have Occasion to indorse it to some other Person, thus :

Pay Thomas White, Esq; or Order, Value of Ditto.

Roger Renolds.

The last Possessor will be thereby entitled to the Contents of Quickflight, when due. This Affair might also have been transacted, without Indorsement, in Manner following.

Ex. 56 l. London, Feb. 17. 174

At one and twenty Days Sight, pay this my second of Exchange, my first not paid, to Roger Renolds, Esq; or Order, the Sum of fifty-six Pounds, the Value receiv'd for your Use, of Henry Hoare, Esq; as pp Advice, from To the Honourable Quintilian Quickflight, Esq; Dublin.

Your humble Servant,

Richard Avery.

A General LETTER of CREDIT, to furnish a Person according to his Occasions.

Sir,

Paris, March 2. 174

The Bearer Mr. Stephen Monteage, one of his Britannick Majesty's Messengers, being ordered to Constantinople, will have Occasion for Money to defray his Charges, &c. Please to furnish him with the Sums he shall require, at said Place, taking his Receipts; and your Draughts for the Value, shall receive due Honour, from

*A Monsieur, Monsieur Salonnier,
Banquier, a Vienne.*

Your humble Servant.

Mich. Toffier.

The Bill consequent to this Letter of Credit, drawn by Salonnier at Vienna, on Toffier, at Paris, for the Sum furnished Monteage.

Sir,

Vienna, April 3. 174

for 720 Flo. at Liv. 3.4.0.

At four Days Sight, pay this my only Bill of Exchange, to Sieur Louis Dugarde, or Order, the Sum of seven hundred and twenty Florins, Exchange at three Livres four Sol. pp Florin, the Value paid at Constantinople, to Monsieur Stephen Monteage, pursuant to your Letter of Credit of the 2d of March last, and as by Advice from said Monteage,

*A Monsieur, Monsieur Toffier,
Banquier, a Paris,*

Andrew Salonnier.

RECREATION XIII.

A Merry young Fellow, in a small Time got the better of $\frac{1}{3}$ of his Fortune; by Advice of his Friends he then gave 2200 *l.* for an Exempt's Place in the Guards; his Profusion continu'd till he had no more than 880 Guineas left, which he found by Computation was just $\frac{3}{10}$ Part of his Money, after the Commission was bought: Pray what was his Fortune at first?

Answer 10450 *l.*

Another of the same Character had 18200 *l.* left him by an old Uncle, to whose Memory he expended 3 $\frac{1}{2}$ Cent. of his whole Fortune in a sumptuous Funeral and Monument; 9 $\frac{1}{2}$ Cent. of the Remainder, he made a Present of to his Cousins, forgotten, for his Sake, by the old Man; with $\frac{2}{3}$ of what was left, he bought a fine Seat; with $\frac{1}{3}$ of the Residue, a Stud of Horses; he squander'd away 550 *l.* upon one Mistress; and after he had liv'd at the Rate of 2000 *l.* a Year, for 19 Months together, he had both ruin'd his Health and impair'd his Fortune: Pray, at his Death, what was there left for his Sister, who was his Heir at Law?

Answer, 6324 *l.* 1 *s.* nearly.

A Tobacconist has by him 120 *lb.* of fine *Oronoko* Tobacco, worth 2 *s.* 6 *d.* a Pound; to this he wou'd put as much *York-River* Ditto at 20 *d.* with other inferior Tobacco's at 18 *d.* and 15 *d.* a Pound, as will make up a Mixture answerable to 2 *s.* a Pound: What will this Parcel weigh?

Answer, 233 $\frac{3}{4}$ *lb.* nearly.

A Father, ignorant in Numbers, order'd 500 *l.* to be divided among his five Sons thus: Give *A.* says he, $\frac{1}{3}$, *B.* $\frac{1}{4}$, to *C.* $\frac{1}{5}$, *D.* $\frac{1}{6}$, and *E.* $\frac{1}{7}$: Part this equitably among them, according to the Father's Intention.

Answer *A.* 152 $\frac{1123}{1734}$ *l.* *B.* 114 $\frac{1044}{1734}$ *l.* *C.* 91 $\frac{1186}{1734}$ *l.* *D.* 76 $\frac{696}{1734}$ *l.* *E.* 65 $\frac{990}{1734}$ *l.*

Three Persons purchase together a *West-India* Sloop, towards the Payment whereof, *A.* advanc'd $\frac{3}{8}$, *B.* $\frac{3}{7}$, and *C.* 140 *l.* How much paid *A.* and *B.* and what Part of the Vessel had *C.*?

Answer, *A.* and *B.* together paid 572 $\frac{8}{11}$ *l.*

A. and *B.* clear by an Adventure at Sea, 50 Guineas, with which they agreed to buy a Horse and Chaise; whereof they were to have the Use, in proportion to the Sums adventured, which was found to be *A.* 10. to *B.* 7. they clear'd 45 $\frac{1}{2}$ Cent. What Money then did each send abroad?

Answer, *A.* 68 *l.* 12 *s.* 6 $\frac{1}{2}$ *d.* *B.* 48 *l.* 9 $\frac{1}{2}$ *d.*

A. and *B.* join their Stocks, and vest them in Brandiy. *A.*'s Stock was 19 *l.* 19 *s.* 8 *d.* more than that of *B.* Now, by selling out their Commodity at 55 *s.* per Anker, *A.* clear'd 74 *l.* 11 *s.* and *B.* just 50 Guineas. The Quantity of Brandy dealt for is required, and the Gain upon the Anker?

Answer, 88 Ankers, whereon clear'd 1 *l.* 8 *s.* 10 $\frac{1}{2}$ *d.* per Anker.

In

DIRECTIONS for LETTERS.

75

In an Article of Trade, *A.* gains 14*s.* 6*d.* and his Adventure was 35*s.* more than *B.*'s, whose Share of Profit is but 8*s.* 6*d.* What are the Particulars of their Stock?

*Answer, A. 4*l.* 4*s.* 7*d.* B. 2*l.* 9*s.* 7*d.**

A. has Currans worth 4*d.* a Pound, but in Truck, charges 6*d.* and also requires $\frac{1}{2}$ of that in ready Money. *B.* has Candles worth 6*s.* 8*d.* the Dozen, and he in Barter, Honest man, charges but 7*s.* Should these Persons deal together for the Value of 20*l.* how much will *A.* have got of *B.*?

*Answer 6*l.* 3*s.* 9 $\frac{1}{2}$ *d.* That is to say,*

A. lets *B.* have Currans to the Value of 20*l.* which stood him in but $\frac{2}{3}$ of the Money, or 13*l.* 6*s.* 8*d.* In return *B.* gives him in Money 10*l.* and to the Value of 10*l.* in Goods, which Goods cost him 9*l.* 10*s.* 5 $\frac{1}{2}$ *d.* The Difference in Account is as above to the Advantage of *A.*

Three Persons enter'd joint Trade, to which *A.* contributed 210*l.* *B.* 312*l.* they clear 140*l.* whereof 37*l.* 10*s.* belongs of right to *C.* that Person's Stock, and the several Gains of the other two, are requir'd?

*Answer, C. Stock, 190*l.* 19*s.* 6*d.* A. Gain'd, 41*l.* 4*s.* 8 $\frac{1}{2}$ *d.**

A Tradesman's Letters should be plain, concise, and to the Purpose, free from quaint or studied Expressions; always pertinent, and conceiv'd in so clear Terms, as may neither give his Reader Hesitation or Doubt. And, as there ought to be nothing obscure or superfluous in them, so ought they to have no affected Abbreviations; for these will often make them ambiguous, or too generally express'd.

All Orders, Commissions, and material Circumstances of Trade, are to be plainly and explicitly deliver'd; nothing should be presum'd, understood or implied. Your Correspondent is to be expressly told, what you would have done on his Part, and what he may depend on, on your's. There should be no Possibility of a Disappointment left, thro' his not being fully inform'd of your Intentions: For, when Orders are darkly given, they are doubtfully observ'd; and a Mistake in Commerce must always be of Consequence.

Nor ought the Correspondent, on the Receipt of Letters, to be less punctual in answering every Article therein referr'd to him; to each Particular whereof, he is to reply distinctly and directly. Nothing must be omitted by him, or left in Suspence, lest the Correspondence should suffer, for want of proper Intelligence.

The Stile fit for Letters, should be short, familiar, neat and significant; like that of Conversation. The Trader should converse with his Correspondent, by Letter, just as he would do, was he to meet him personally upon Change; and whatever he would say, face to face, that is proper to be written, on any Point of Business.

A Country Chapman's ORDER for Goods.

Mr. Nicholas Candy,

Chester, May the 25th. 174 .

HAVING completed my seven Year's Service with Mr. *Laurence Dealwell*, your old Chapman, I have now ventur'd into the World, and taken a Shop in the same Town; I would desire you to send me by the next Return half a But of Currans; 5 Barrels of Raisins of the Sun; 8 Fraills of *Malaga*; Sugars, at 3d. 4d. and 5d. $\frac{1}{2}$ Pound, each 4 Cwt. Cloves, Mace, Nutmegs, Cinnamon, each 3 lb. $\frac{1}{2}$ Cwt. of Pepper; a Cwt. of Pymento; 16 Sugar Loaves of various Sorts; 4 Cwt. of Treacle; 5 Cwt. of Prunes; 2 Barrels of Figs; $\frac{1}{2}$ Cwt. of Ginger. Draw your Bill upon me for half the Value, it shall be paid at Sight, the rest at three, or four Months: So that I expect a Price according. For being a young Man, if I cannot buy and sell my Goods as low as others, I must expect no Trade. As you deal with me in this, you shall hear more frequently, from

Your loving Friend,

Thomas Hopeful.

The Apprentice's ANSWER, his Master being Sick, or out of the Way.

Mr. Thomas Hopeful,

MY Master's Indisposition confining him to his Bed, renders him unfit to write an Answer to your's of the 25th of May last; however, he has order'd me to let you know, that the Confidence you have repos'd in him, he takes very kindly, and assures you, that he will use you so well, and go so low, that you shall be very well satisfied. I have taken care to put up as choice Goods as any are in Town, and sent them by *Lawrence Carrywell* the Carrier. The particular Quantity and Prices, I have, in a Bill of Parcels, hereunto annex'd; and, at your desire, have drawn on you for $\frac{1}{2}$ the Value, payable to Mr. *Charles Dean*, or Order. For the Remainder my Master would not have you streighten yourself for Time, and hopes he shall have your farther Order, as you find he deals with you in this, which is all that offers at present, from

Your humble Servant,

*Ready Writer;*Servant to Mr. *Nich. Candy.*

London, June 11. 174 .

The

The Apprentice's LETTER, advising the said REMITTANCE, to another of his Master's Correspondents.

Mr. Charles Dean,

Sir,

London, June 11. 174

MY Master has kept his Bed this Fortnight, with the Gout, but is at present better. He orders me to acquaint you, that having an Opportunity of paying you some part of your Balance, he has inclosed remitted you a Bill, for 65 l. 14 s. 1 d. on Mr. Thomas Hopeful, your Townsman, to be paid at Sight. He is beginning the World, and my Master being partly a Stranger to him, desires when you write, to advise something of his Character and Circumstances. Please to give a Line upon Receipt of the Bill, and as Opportunity presents, you may depend upon the rest. This at present, with the Family's Service, is all from,

Sir,

Your humble Servant,

Ready Writer.

P. S. My Master desires to be inform'd, what the Assignees have done in Mr. Chapman's Affair; and whether Mr. Indolent's Certificate will be allow'd.

The BILL inclosed.

Sir,

London, June 11. 174 . for 65 l. 14 s. 1 d.

At Sight, pay to Mr. Charles Dean, or Bearer, the Sum of sixty five Pounds, fourteen Shillings, and a Penny, the Value here deliver'd in Goods to Lawrence Carrywell, for your Use, and place it to Accompt of my Master Nicholas Candy, as ~~per~~ Advice, from

To Mr. Thomas Hopeful,
Grocer, Chester.

Your humble Servant,

Ready Writer.

The BILL of PARCELS upon the preceding LETTER,

Sold to Mr. Thomas Hopeful of Chester, June 11, 174 .

		Cwt.	qr.	lb.	lb.	Cwt.	qr.	lb.	d.		l.	s.	d.
$\frac{1}{2}$ But of Currans, _____	wt. Gr.	9	0	7	Tr. 140	Nt. 7	3	7	at 4	d^{d} lb.			
5 Barrels of Raisins of the Sun,		15	0	0	180	13	1	16	3 $\frac{1}{2}$	_____			
8 Frails of Malaga Raisins, _____		4	0	0	36	3	2	20	2 $\frac{1}{2}$	_____			
2 Barrels of Sugar, _____		4	1	0	28	4	0	0	3	_____			
Ditto. _____		4	1	0	28	4	0	0	4	_____			
Ditto. _____		4	1	0	28	4	0	0	5	_____			
Ditto. _____		4	1	5	33	4	0	0	9	_____			
Ditto. _____		4	1	11	39	4	0	0	8	_____			

3 Pound of Cloves, _____						at 7	4	d^{d} lb.
3 lb. of Mace, _____						at 13	0	_____
D ^r . Cinnamon, _____						6	0	_____
D ^r . Nutmegs, _____						7	0	_____
$\frac{1}{2}$ Cwt. of Pepper, _____						3	3 $\frac{1}{2}$	_____
1 Cwt. of Pymento, _____	lb.					1	5	_____
4 Sugar-Loaves, _____	wt. 32 $\frac{1}{4}$					0	8	_____
Ditto. _____	36					0	9	_____
Ditto. _____	27 $\frac{1}{2}$					0	9 $\frac{1}{2}$	_____
Ditto. _____	22					0	10 $\frac{1}{2}$	_____
4 Cwt. of Treacle, _____						13	9	d^{d} Cwt.
5 Cwt. of Prunes, _____						13	0	_____
2 Barrels of Figs, wt. Gr. 1 $\frac{1}{2}$ Cwt. Tr. 32 lb. Nt. 1 $\frac{1}{2}$ Cwt. 24 lb. _____						29	2	_____
$\frac{1}{2}$ Cwt. of Ginger, _____						0	7 $\frac{1}{2}$	d^{d} lb.

 l. 131 . 8 . 3

Ano-

Another Chapman's ORDER for Goods.

Mr. Nich. Allom and Comp.

Exon, June 16. 174 .

THIS is to desire you to send ~~off~~ the next Vessel, bound for *Exeter*, the Goods following, viz. Galls, 3 Bags; Indigo, 5 Barrels; Allom, 17 Cwt. Logwood, $\frac{1}{2}$ a Ton; Madder, 14 Cwt. Copperas, 3 $\frac{1}{2}$ Tons; *Bahia* Brazil, 4 Cwt. *Bourdeaux* Cream of Tartar, 6 $\frac{1}{2}$ Cwt. *West-India* Fustick, 5 $\frac{1}{2}$ Ton; Red Sanders, 6 $\frac{1}{2}$ Cwt. *Valona* Caps ground, 9 $\frac{1}{2}$ Cwt. For the Balance of my last Accompt being 295 *l.* 14 *s.* 9 *d.* I have here inclosed sent you a Bill of Exchange, at 12 Days Sight, on Mr. *Lawrence Gemroy*, Merchant in *London*, to whom I have given Advice this Day. Set the Prices as low as you can, and when you expect your Money for this Parcel, draw your Bills upon me, they shall receive due Honour, from

Your loving Friend,

Zach. Careful.

The BILL inclosed.

Sir,

Ex. 295 *l.* 14 *s.* 9 *d.* Exon, June 16. 174 .

At twelve Days Sight, pay Mr. *Nich. Allom*, or Order, the Sum of two hundred ninety five Pounds fourteen Shillings and nine Pence, and place it to Accompt, as ~~off~~ Advice, from

To Mr. *Lawrence Gemroy*,
Merchant, in *London*.

Yours,

Zach. Careful.

A LETTER of ADVICE upon the mentioned Draught, to Mr. *Lawrence Gemroy*.

Sir,

YOur's of the 20th past came to hand, the Day the Vessel sail'd with your Goods on board; I shall however take the first Opportunity to send the Stuffs mention'd in your last Order: Mean time, have this Post drawn on you 295 *l.* 14 *s.* 9 *d.* at 12 Days Sight, to Mr. *Nich. Allom*, or Order, which please to honour as usual, to oblige,

Sir,

Your affectionate Kinsman,
and humble Servant,

Zach. Careful.

Exon, June 16. 174 .

An

An Apprentice's ANSWER to the foregoing LETTER, from Mr. Zach. Careful.

Sir,

London, June 24. 174 .

MY Master receiv'd your's of the 16th Instant, with the Bill of Exchange inclos'd, which is now accepted. The Parcel of Goods, writ last for, I have this Day ship'd on Board the *Coaster* of *Exon*, *John Miller*, Master, being mark'd and number'd as d^{d} Margin *. The Bill of Lading, and the Bill of Parcels are both annex'd. My Master and Partner are now out of Town; for that Reason, I have taken all possible care to please you in both Goods and Prices. What you have farther occasion for in our Way, be pleas'd to signify your Order, and it shall faithfully and diligently be perform'd, by

Your humble Servant,

*Ferdinando Failnone,*Servant to Mr. *Nich. Allom*, and Company.

The BILL of PARCELS on the preceding LETTER.

Sold to Mr. *Zachary Careful*, June 24. 174 .

	Cwt.	qr.	lb.	lb.	Cwt.	qr.	lb.	l.	s.	d.	
3 Bags of Galls — wt. Gr.	9	2	27	Tr. 36	Nt. 9	1	19	at 3	5	0	d^{d} Cwt. l.
5 Barrels of Indigo,	15	2	19	72	15	0	03	9	7	0	
17 Cwt. of Allom, —————								0	12	0	
$\frac{1}{2}$ Ton of Logwood, —————								4	7	0	d^{d} Ton.
14 Cwt. of Madder, —————								2	18	6	d^{d} Cwt.
3 $\frac{1}{2}$ Ton of Copperas, —————								8	0	0	d^{d} Ton.
4 Cwt. of <i>Bahia</i> Brazil, —————								2	0	0	d^{d} Cwt.
6 $\frac{1}{2}$ Cwt. of <i>Bordeaux</i> Cream of Tartar, —————								2	14	0	
5 $\frac{1}{2}$ Ton of <i>West-India</i> Fustick, —————								0	14	3	
6 $\frac{1}{2}$ Cwt. of Red-Sanders, —————								2	0	0	
9 $\frac{1}{2}$ Cwt. of <i>Valona</i> Caps, ground —————								0	11	6	

* [*As d^{d} Margin in the subsequent Bill of Lading.*]

l. 374 . 16 . 6

The

The BILL of LADING.

BShip'd, by the Grace of God, in good Order, and well Conditioned, by [Mr. Nich. Allom and Company,] in and upon the good Ship, called the [Coaster of Exeter,] whereof is Master, under God, for this present Voyage, [John Miller,] and riding at Anchor, in [the River of Thames] and by God's Grace bound for [Exeter.] To say, [eleven Parcels of several sorts of Goods,] being mark'd and number'd as in the Margin, and are to be delivered in like good Order, and well condition'd, at the aforesaid Port of [Exeter,] (the Danger of the Seas only excepted) unto [Zach. Careful,] or to his Assigns, he or they paying for Freight of the said Goods, [sixteen Shillings four Pence] p^{r} Ton, with Primage and Average accustom'd: In Witness whereof, the Master or Purser of the said Ship has affirm'd to * three Bills of Lading, all of this Tenor and Date, one of which being accomplish'd, the other two stand void. And so God send the good Ship to her desir'd Port in Safety. Amen.

N^o
I to II.

Dated in [London, June
the 24th, 174 .]

The Contents and Quality unknown,

John Miller.

The BILL of ENTRY, at the Custom-House, June 24. 174 .

In the Coaster of Exon, John Miller; for Exon. Nich. Allom and Company.

Nine Hundred, one quarter and nineteen Pounds of Galls.
Fifteen Hundred and three Pounds of Indigo.
Seventeen Hundred of Allom, &c. (as p^{r} foregoing Bill of Parcels exactly.)

* The three Bills of Lading mention'd, are dispos'd of in this manner; one remains with the Person who ship'd the Goods; one is kept by the Master of the Ship; and the Third is sent to the Person who is to receive them.

A Third ORDER from the Country, for Goods.

Mr. *Nebemiah Holland*,*Worcester, July 24. 174 .*

I Am sorry you should meet with a Disappointment, in the Return of Money, which I order'd *Nich. Careless* to pay you, when he was in *London* last Week: The first opportunity that offers, I shall take care to remit you a Bill, or if you have any Opportunity, draw your Bill on me, it shall be paid at Sight. Be pleas'd to send me by the Carrier, the next Return, 3 Ps. of Dowlas; Hollands, at 2s. 1d. 2s. 8d. 3s. 2d. 3s. 9d. each 2 Ps. and 3 Ps. of Bag Holland, at 4s. 8d. five Ps. of Cambrick, from 3l. 10s. to 5l. 3 Ps. of Checks, 10 Ps. of Blue Hertfords, 6 Ps. of Ghentings, 4 Ps. of Muslins, from 4l. to 8l. 3 Ps. of Crocus. Send the lowest Price, and the Time of Payment, I shall be punctual, being

Your loving Friend,

Samuel Longell.

A Servant's ANSWER.

Mr. *Samuel Longell*,*London, Aug. 10. 174 .*

YOur's of the 24th of *July* last was receiv'd. I have ~~by~~ *John Surley*, *Worcester* Carrier, sent you the Goods I wrote for, in your last; the Bill of Parcels have hereunto annex'd. My Master's Affairs calling him to *Bristol*, I have done my utmost to content you, both in Goods and Prices; being of Opinion you never had better Goods, or a better Penyworth. For what remains on the old Accompt, an Opportunity will offer to draw a Bill on you next Week. What you have occasion for farther, signify your Order, it shall be carefully followed; and as to time of Payment, my Master will be as reasonable as any Man. I add no more at present, but that I am,

Your humble Servant,

Thomas Measurewell, Servant to
Nebemiah Holland

The BILL mention'd to be drawn at Opportunity.

86l. 10s. London, Aug. 19. 174 .

Sir,

Pay Mrs. *Charity Somerfield*, or Order, the Sum of eighty six Pounds, ten Shillings, eight Days after Date, Value of Capt. *Edward Somerfield*, and place it to Accompt of my Master *Nebemiah Holland*, as ~~by~~ Advice from
To Mr. *Samuel Longell*,
Draper, in *Worcester*.

Your very humble Servant,

Tho. Measurewell.

The

The BILL of PARCELS.

Sold to Mr. Samuel Longell, Aug. 11. 174 .

	Ells.	s.	d.	
3 Ps. of Dowlas,	84 $\frac{1}{2}$			at 1 . 1 $\frac{1}{2}$ Ell. — l.
2 Ps. of Holland,	38	2	2	
Ditto.	38	2	8	
Ditto.	39 $\frac{1}{2}$	3	2	
Ditto.	37 $\frac{1}{2}$	3	9	
3 Ps. of Bag Holland,	77 $\frac{1}{2}$	4	8	
1 Ps. of Cambrick,				3 . 9 . 0
Ditto.	Qt. 8	11	6	Yard. —
Ditto.	8	12	0	
Ditto.	8	13	6	
Ditto.	8	16	6	
10 Ps. of Hertfords,	247	0	6 $\frac{1}{4}$	
3 Ps. of Checks,	45	35	0	Ps. —
6 Ps. of Ghenting, viz.	Yds.	s.	d.	
N ^o . 1.	Qt. 8	at 1 . 10 $\frac{1}{2}$	Yard. —	
2.	8 $\frac{1}{2}$	1 . 11		
3.	8 $\frac{3}{4}$	2 . 0		
4.	9	2 . 3		
5.	8 $\frac{1}{2}$	2 . 5		
6.	8	2 . 6		
1 Ps. of Muslin,	20	4 . 0		
Ditto.	20 $\frac{1}{2}$	5 . 6		
Ditto.	21 $\frac{1}{2}$	6 . 10		
Ditto.	20	8 . 0		
3 Ps. of Crocus,	84	10 . 0		

l. 161 . 2 . 7

RECRE-

RECREATION XIV.

A. and *B.* in Partnership equally divide the Gain; *A*'s Money, which was 84 *l.* 12 *s.* 6 *d.* lay for 19 Months, and *B*'s for no more than 7: The Adventure of the latter is sought?

Answer 229 *l.* 13 *s.* 11 $\frac{1}{2}$ *d.*

In 117 times 406 Pieces of Coin, worth 3 *s.* 8 $\frac{2}{3}$ *d.* a Piece; how many Reas at 20 for 3 *d.* English?

Answer 14145040.

A. has Kerseys at 4 *l.* 5 *s.* a Piece, ready Money; in Barter, they are, charg'd by him, at 5 *l.* 6 *s.* each, and $\frac{1}{2}$ of that required down. *B.* has Flax at 3 *d.* a Pound; how ought he to rate it in Truck, not to be hurt by the Extortion of *A*?

Answer 5 *d.* nearly.

Lent 109 Guineas, at 4 $\frac{1}{2}$ Cent. which by the 18th of Aug. 1740, was rais'd, by the Interest, to as many Moidores, bating 2 *s.* 6 *d.* Pray on what Day did the Bond bear Date?

Answer, July 7. 1733.

Put out 384 *l.* to Interest, and in 8 $\frac{1}{4}$ Years, there were 542 *l.* 8 *s.* found to be due; what Rate of Interest could then be implied?

Answer, 5 $\frac{1}{2}$ Cent. $\frac{1}{2}$ Annum.

A. for a nine Month's Adventure received 20 *l.* *B.* for one of 7 Months received 25 Guineas; and *C.* for lying out of his Contribution 5 Months, had a Title to 32 *l.* The Total of their Adventures, multiply'd into their respective Times, was 640 *l.* What then were the Particulars?

Answer, *A.* 18 *l.* 3 *s.* 6 *d.* *B.* 30 *l.* 13 *s.* 5 *d.* *C.* 52 *l.* 6 *s.* 10 $\frac{1}{4}$ *d.*

A. clears 13 *l.* in 6 Months; *B.* 18 *l.* in 5 Months; and *C.* 23 *l.* in 9 Months, with a Stock of 72 *l.* 10 *s.* What then did the general Stock amount to?

Answer, 131 *l.* 6 *s.* 10 *d.* nearly.

I have imported 80 Jars of Luca Oil, each containing 1180 solid Inches: What came the Freight to, at 4 *s.* 6 *d.* $\frac{1}{2}$ Cwt. Tare, 1 in 10; counting 7 $\frac{1}{2}$ Pounds of Oil to the Wine Gallon of 231 Cubic Inches?

Answer, 6 *l.* 16 *s.* 9 $\frac{1}{2}$ *d.*

A. had 15 Pipes of Malaga Wine, which he parted with to *B.* at 4 $\frac{1}{2}$ $\frac{1}{2}$ Cent. Profit, who sold them to *C.* for 38 *l.* 11 *s.* 6 *d.* Advantage; *C.* made them over to *D.* for 500 *l.* 16 *s.* 8 *d.* and clear'd thereby, 6 $\frac{1}{2}$ $\frac{1}{2}$ Cent. What did this Wine cost *A.* a Gallon?

Answer, 4 *s.* 4 $\frac{3}{4}$ *d.*

If 19 Yards of yard-wide Stuff exactly line 14 Yards of Silk of another Breadth: How many of the latter will line 184 Pieces of the former, each Piece holding 28 $\frac{1}{2}$ Yards?

Answer, 3864 Yards.

A. has

RECREATION.

85

A. has 50 Broad-Cloths, at 11 *l.* 10 *s.* a Piece, but in Change, requires 13 *l.* taking Wool, at 2 *s.* 6 *d.* $\frac{1}{2}$ Stone of *B.* in Return, that was really worth but 4 *s.* 2 *d.* a Tod: The Question is, how many Sacks of Wool will pay for the Cloth, and which of the Dealers has the better in the Bargain?

Answer, 200 Sacks. *B.* got 33 *l.* 6 *s.* 8 *d.* by the Affair.

V. of *Amsterdam*, draws on *X.* of *Hamburg*, at 67 *d.* Flem. $\frac{1}{2}$ Dollar of 32 Solz *Lubeck*; and on *Y.* of *Nuremburgh*, at 70 *d.* Flem. $\frac{1}{2}$ Florin of 65 *Crutzers* Current: If *V.* has orders to draw on *X.* in order to remit to *Y.* at said Prices, how would run the Exchange between *Hamburg* and *Nuremburgh*?

Answer, 33 $\frac{2}{3}$ Solz Lub. $\frac{1}{2}$ Florin.

M. of *Amsterdam*, orders *N.* of *London*, to remit *O.* of *Paris*, at 54 *d.* Sterl. $\frac{1}{2}$ Crown, and to draw on *P.* of *Antwerp*, for the Value, at 33 $\frac{1}{2}$ *s.* Flem. $\frac{1}{2}$ Pound Sterl. but as soon as *N.* received the Commission, the Exchange was on *Paris*, at 54 $\frac{1}{2}$ $\frac{1}{2}$ Crown: Pray at what Rate of Exchange ought *N.* to draw on *P.* to execute his Orders, and be no Loser?

Answer, 33 *s.* 2 $\frac{3}{4}$ *d.*

A. with Intention to clear 30 Guineas, on a Bargain with *B.* rates Hops at 16 *d.* $\frac{1}{2}$ Pound, that stood him in 10 *d.* *B.* appriz'd of that, sets down Malt, which cost 20 *s.* a Quarter, at an adequate Price: How much Malt did they contract for?

Answer, 420 Bushels.

A. and *B.* venturing equal Sums of Money, clear by joint Trade 154 *l.* By Agreement, *A.* was to have 8 $\frac{1}{2}$ Cent. because he spent Time in Execution of the Project, and *B.* was to have only 5: The Question is, what was allotted *A.* for his Trouble?

Answer, 35 *l.* 10 *s.* 9 $\frac{1}{4}$ *d.*

A. in order to put off to *B.* 720 Ells of damag'd Holland, worth 5 *s.* an Ell, at 6 *s.* 8 *d.* proposes, in case he has $\frac{1}{2}$ the Value in Money, to give *B.* a Discompt of 10 $\frac{1}{2}$ Cent. The rest *A.* is to take out in Saffron, which *B.* appriz'd of the whole Management, rates in Justice, at 30 *s.* the Pound: Pray what was it really worth in ready Money; and what Quantity of Saffron was he to deliver on the Change?

Answer, 20 *s.* the Pound, and 72 of them.

A. lent his good Friend *B.* fourscore and eleven Guineas, from the 11th of *December* to the 10th of *May* following; *B.* on another Occasion let *A.* have 100 Marks, from *September* 3. to *Christmas* following: Query, how long ought the Person oblig'd, to let his Friend use 40 *l.* fully to retaliate the Favour?

Answer, 170 Days nearly.

Laid out in a Lot of Muslin 480 *l.* 12 *s.* upon Examination of which, two Parts in seven proved damaged; so that I cou'd make but 5 *s.* 6 *d.* a Yard of the same; and by so doing find I lost 48 *l.* 18 *s.* by it. At what Rate per Ell am I to part with the undamaged Muslin to make up my said Loss?

Answer, 12 *s.* 2 $\frac{1}{2}$ *d.* nearly.

A LETTER from a Merchant to his Factor.

Mr. Isaac Sharp,

Sir,

YOur's of the 11th current I received, and am glad to understand you will recover good Part of your Loss, of the Insurers of the *Swan*. My Account of Sales inclos'd I have examined, and am satisfied with the Net Proceed and your Management therein. With Convenience, please to buy 10 Hhds. of white Biscuit, and 49 Barrels of Beef, and send ~~off~~ first Vessel to *Jamaica*, consign'd to Mr. *Thomas Gunston*, for my Accompt: Pray engage your Victualler to get the Beef carefully salted and barrelled, considering the Climate to which it is sent; I am,

London, July 19. 174

Sir,

Your Friend and Servant,

Richard Allom.

A N S W E R from the Factor to his Employer.

Mr. Richard Allom,

Sir,

I nclos'd are the Invoice and Bill of Lading of 49 Barrels of Beef, and 10 Hhds. of white Biscuit, bought and consign'd by your Order to Mr. *Thomas Gunston*, at *Port-Royal*; which being well cask'd, I hope will prove well, and arrive to a good Market. An Opportunity presents of Drawing upon you for the Value, payable at one and twenty Days Sight to the Commissioners of Customs at *London*, which I must entreat you to honour, and hope in a very short Time to answer your Expectations, as to my Balance depending: In the mean time, as Occasion offers, let me have the Honour of your Commands, who am,

Dublin, Sept. 7. 174

Sir,

Your oblig'd humble Servant,

Isaac Sharp.

For Practice, the Learner may be put to draw Bills of Lading, Entry and Exchange, consequent to this Advice, by former Precedents.

Invoice

INVOYCE from IRELAND.

87

Laus Deo. in Dublin, Sept. 5. 174

Invoyce of 49 Barrels of Beef, and 10 Hhds. of white Biscuit, ship'd by me *Isaac Sharp* on board the *Dublin Merchant, Nich. Tory*, Master; and goes consign'd to Mr. *Thomas Gunston*, Merchant, at *Port-Royal in Jamaica*; for the proper Account and Risque of Mr. *Richard Allom* of *London*, being mark'd and number'd as d Margin. Content, Cost, and Charges, viz.

Imprimis, To 49 Barrels of Beef, bought of *Jonas Long*, at 15 s. 6 d. d Barrel. ———— l.
To 10 Hhds. of white Biscuit, bought of *Will. Man*, 29 Cwt. 26 lb. at 10 s. d Cwt. —

N^o 1 to 59.

CHARGES.

T/G

To Custom of the Beef, —————	l. 2 . 9 . 0
<i>Ditto.</i> of the Biscuit, —————	0 . 10 . 0
Entry, and Fees of Cocket, —————	0 . 5 . 6
Searcher, and Warfinger's Fees of all, —————	0 . 7 . 6
Carts to the Custom-house, 1 $\frac{1}{2}$ d. d Barrel, —————	0 . 6 . 1
Carts for Hhds. to the Baker's, and to the Custom-house, —————	0 . 3 . 4
For 10 Hhds. 25 s. and Cooperage, Hoops and Heading, 16 s. —————	2 . 1 . 0
Porters and Shipping, —————	0 . 3 . 4

l. 6 . 5 . 9
l. 1 . 9 . 5

Supposing the Ex^o Current to be 10 d Cent. in favour of *England*; pray what Sum may Mr. *Sharp* at *Dublin* draw for on *London*, on Account of the Factory above?

To my Commission at 2 $\frac{1}{2}$ d Cent. —————

l. ————

Errors excepted, —————

d *Isaac Sharp.*

Answer, l. 54 . 17 . 3

[Invoyce or Factory] is the Account of Cost, Custom, Provision, Charges, &c. of Goods, sent from a Merchant or Factor, to his Correspondent or Employer, beyond Sea.

[Commission or Provision] is an Allowance to the Factor, for his Pains in doing Business for his Employer.

Invoyce

INVOICE from JAMAICA.

Port Royal in Jamaica, Nov. 15. 174.

Invoice of 5 Barrels of Indigo, 5 Hhds. of Pymonto, and 5 Hhds. of Sugar, ship'd on board the *Lyon*, *William Jones* Master; for Accompt and Risque of *Nath. Owen*, Merchant in *London*, being mark'd and number'd as under.

Contents, Costs and Charges, viz.

Indigo, 5 Barrels.



N^o. 142
1. 143
— 146
to 152
— 173
5

756 lb. Nt. at 2 s. 1 d. ₤ lb. ————— l.

Pymonto, 5 Hogsheds.

N ^o .	Gr. 432	Tr. 84	lb.
1.	396	72	Gr. 2026
—	410	81	Tr. 389
to	376	70	
—	412	82	Nt. 1637
5.			at 11 ½ d. ₤ lb. ————— l.
	2026	389	

Sugar, 5 Hogsheds.

Cwt. qr. lb.

Gr. 52 . 1 . 20
Tr. 8 . 2 . 0

Nt. 43 . 3 . 20 at 24 s. ₤ 100 lb. ————— l.

Charges, viz.

To Cost of 5 Barrels and 10 Hogsheds	4 . 7 . 9
To Storage, 2 ½ ₤ Cent.	5 . 4 . 11
To Commission, at 5 ₤ Cent.	10 . 19 . 7

Errors excepted, ₤ Edwin and Sandcroft.

l. 230 . 10 . 10

Note, In the American Plantations, 100 lb. is their Cwt.

RECRE-

RECREATION XV.

A Bond was made on the 7th of *August* 1713, at 6 *per Cent. per Annum* for the Sum of 1114 *l.* 10 *s.* On the 11th of *May* 1718, 140 *l.* was paid off, and a fresh Bond enter'd into for the Remainder at $5\frac{1}{4}$ *per Cent. per Annum*. At the Time the Interest of this last was 21 *l.* 16 *s.* 8 *d.* there was paid off 87 *l.* 11 *s.* 9 *d.* The old Bond being then taken up, a new one was given for the Residue; which being paid off on the 11th of *September* 1724, the Bond-owner took no more than 1409 *l.* 16 *s.* 8 *d.* in full Payment. At what Rate then did he take Interest *per Cent. per Annum* upon the last Renewal of the Bond?

Answer, 2 *l.* 9 *s.* 6 $\frac{1}{2}$ *d.*

A. *B.* and *C.* will trench a Field in 12 Days; *B.* *C.* and *D.* in 14; *C.* *D.* and *A.* will do it in 15; and *D.* *A.* and *B.* in 18: In what Time will it be done by all of them together, and by each of them singly?

Answer, Together in 10,83 Days. By *A.* in 47,848. *B.* 38,969. *C.* in 27,194. *D.* in 111,176 Days.

A. at *Paris*, draws on *B.* of *London* 1200 Crowns, at 55 *d.* Sterl. $\frac{1}{4}$ Crown, for the Value whereof, *B.* draws again on *A.* at 56 *d.* Sterl. $\frac{1}{4}$ Crown, besides reckoning Commission $\frac{1}{2}$ $\frac{1}{4}$ Cent. Did *A.* get or lose by this Transaction, and what?

Answer, He got 15 Crowns $\frac{1}{2}$ *d.*

Amsterdam changes on *London*, at 34 *s.* 4 *d.* $\frac{1}{4}$ Pound Sterl. and on *Lisbon*, at 52 *d.* Flem. for 400 Reas: How then ought the Exchange to go between *London* and *Lisbon*?

Answer, 75 $\frac{1}{2}$ *d.* Sterl. for 1000 Reas.

A Druggist has by him 4 Sorts of Green Tea, viz. of 5 *s.* 6 *s.* 8 *s.* and 9 *s.* $\frac{1}{4}$ Pound: Out of these he is inclin'd to mix up a Tub, containing Nt. a Hundred and a half, so as to make the Commodity worth 7 *s.* the Pound: In what Proportion must those Tea's be taken?

Answer, Either 42 *lb.* of each; or else 28 *lb.* of those of 8 *s.* and 6 *s.* with double that Quantity of the other two Sorts: And in Truth as many Answers may be found to this Proposition, as there are different Ways of alligating properly the Prices of the Goods propos'd. The Judgment of the Trader will however rather appear in consulting the Quality of his Goods, in order to the making an agreeable Mixture of them, than in taking any Direction from their Price or Value.

A. has 100 Reams of Paper, at 8 *s.* ready Money, which in Barter he sets down at 10 *s.* *B.* sensible of this, has Pamphlets at 6 *d.* a Piece, ready Money, which he adequately charges, and insists besides on $\frac{1}{4}$ of the Price of those he parts with in Specie: What Number of the Books is he to deliver in lieu of *A.*'s Paper; what Cash will make good the Difference; and how much is *B.* the Gainer by this Affair?

Answer, They deal upon the *Par* for $\frac{3}{4}$ of the Paper, for which *B.* delivers 1200 Pamphlets; by the other $\frac{1}{4}$ or 400, rated at 7 $\frac{1}{2}$ *d.* which cost him $\frac{1}{4}$ of 7 $\frac{1}{2}$ *d.* less, or 4 $\frac{1}{8}$ *d.* a Piece, he clears 3 $\frac{1}{8}$ *d.* $\frac{1}{4}$ Book. 5 *l.* 12 *s.* 6 *d.* in all.

A. B. and C. company A. put in his Share of the Stock for 5 Months, and laid claim to $\frac{1}{3}$ of the Profits ; B. put in his for 8 Months, C. advanced 400 l. for 7 Months, and required on the Balance $\frac{2}{3}$ of the Gain : The Stock of the other two Adventurers is sought ?

Answer, A. 168 l. B. 70 l.

A young Hare starts 5 Rods before a Greyhound, and is not perceiv'd by him, till she has been up 34 Seconds ; she scuds away at the Rate of 12 Miles an Hour, and the Dog, on view, makes after her, at the Rate of 20 : How long will the Course hold, and what Ground will be run, beginning with the Outsetting of the Dog ?

Answer, 58 $\frac{1}{2}$ Seconds, and 1702 $\frac{1}{2}$ Feet run.

A. and B. barter ; A. has 140 lb. 11 oz. of Silver Twist, at 6 s. 4 d. the Ounce, which in Truck he rates at 7 s. 2 d. an Ounce, and allows a Discount, to have $\frac{1}{4}$ of that in ready Specie. B. has Tea worth 9 s. 6 d. the Pound, which he rates at 11 s. 2 d. When they come to strike the Balance, A. receiv'd but 7 Cwt. 2 oz. 18 dr. of Tea : Pray what Discount did A. allow B. which of them had the Advantage, and how much in an Article of Trade thus circumstanced ?

Answer, Discount 7 l. 15 s. $\frac{1}{4}$ d. $\frac{1}{2}$ Cent. B. the Advantage by 63 l. 19 s.

London changes with Amsterdam, on Par, at 33 $\frac{1}{2}$ s. Flem. $\frac{1}{2}$ Pound ; Amsterdam changes on Middleburgh, at 2 $\frac{1}{2}$ Cent. advance : How stands the Exchange between London and Middleburgh.

Answer, 34 s. Flem. $\frac{1}{2}$ Pound Sterl.

R. of Rotterdam, remits to R. of Paris 2000 Crowns, at 91 d. Flem. $\frac{1}{2}$ Crown, at double Usance, or 2 Months, and pays $\frac{1}{10}$ $\frac{1}{2}$ Cent. Brokerage, with Orders to remit him again the Value, at 93 d. $\frac{1}{2}$ Crown, allowing at the same time $\frac{1}{4}$ $\frac{1}{2}$ Cent. for Provision : What is gain'd $\frac{1}{2}$ Cent. $\frac{1}{2}$ Annum, by a Remittance thus manag'd ?

Answer, 10 $\frac{1}{11111}$.

If I leave Exeter at 10 o'Clock on Tuesday Morning for London, and ride at the Rate of 2 Miles an Hour without Intermiſſion ; you set out of London for Exeter at 6 the same Evening, and ride 3 Miles an Hour constantly : The Question is, whereabouts on the Road you and I shall meet, if the Distance of the two Cities be 130 Miles ?

Answer, 61 $\frac{1}{2}$ Miles from Exeter.

A Reservoir for Water has 2 Cocks to supply it ; by the first it may be fill'd alone in 44 Minutes ; by the second, in just an Hour ; and it hath a discharging Cock, by which it may, when full, be emptied in half an Hour : Now, suppose these 3 Cocks, by Accident, should all of them be left open, and the Water should chance to come in : What Time, supposing the Influx and Efflux of the Water to be always alike, would this Cistern be in filling ?

Answer, 2 $\frac{1}{2}$ Hours.

A. sets out of London for Lincoln, at the very same time that B. at Lincoln sets forward for London, distant 100 Miles. At 8 Hours End they meet on the Road, and it then appear'd that A. had rid 2 $\frac{1}{2}$ Miles an Hour more than B. At what Rate an Hour did each of them travel ?

Answer, A. 7 $\frac{1}{2}$ Miles. B. 5.

Invoice

INVOYCE from HOLLAND.

98

Amsterdam, Jan. 10. 174 .

Invoyce, or Factory, of 10 Ps. of Holland, 10 Ps. of Cambrick, 9 Ps. of Ghentish Cloth, laden by me *Jonas Diligent*, aboard the *Jessab*, *Thomas Cock*, Master; for the proper Account and Risque of *Henry Porter*, Merchant in *London*, under the Mark of Margin: Contents, Costs and Charges, viz.

10 Ps. of Holland.		No.		5 Ps. Qt.		Gil. Sti. Pen.	
N ^o .	Qt.	N ^o .	Qt.	5 Ps. Qt.			
1.	31 $\frac{1}{2}$	6.	33 $\frac{1}{2}$	Ditto.			
—	33 $\frac{1}{4}$	—	32				
—	32	—	34				
to	31	to	31 $\frac{1}{2}$				
—	30 $\frac{1}{2}$	—	32 $\frac{1}{2}$				
5,		10					
9 Ps. of Cambrick,	Qt. 124 $\frac{1}{2}$ Ells Flem.	at 1 Gil. 3 Stiv.	of Ell.				
9 Ps. of Ghenting,	Qt. 105 $\frac{1}{2}$ Ells Flem.	at 19 Stiv.	of Ell.				

CHARGES.



To Custom and Brokerage of the Hollands,	3 Gil. of Ps.	
To Charges in buying		
To Custom of Cambrick and Ghentings		
To Sledage and Boatage		
To Warehouse Room		
To Average and Portage		

To my Commission, at 2 $\frac{1}{2}$ of Cent.

Errors excepted,

From your humble Servant,

Jonas Diligent.

What *Sterl.* shall Mr. *Porter* charge himself with, on Account of the said Invoyce, Ex^o. at 34 s. 6 d. for 20 s. *Sterl.*

Anfw. l. 79 . 9 . 9

An Account of SALES.

Port Royal, in Jamaica, Anno 174 .

An Account of Sales of 2765 Ells of brown Ozenbrigs; 1112 Yards of blue Hertfords; 2 Ps. of black Cloth, Qt. 39 Yards; 40 Pair of Stockings; and 175 Ells of Bag Holland, receiv'd from on board the *Lion*, Capt. *Banister* Master, from *London*, on Account of *Mr. Edward Luckey*, is ——— Dr.

	l.	s.	d.
To Portage of Ditto, —————	1.	0.	17 . 6
To Commission on Sales, 5 $\frac{1}{2}$ Cent. —————	12.	16.	9
To Storage, 2 $\frac{1}{2}$ $\frac{1}{2}$ Cent. —————	5.	9.	1
		19.	3 . 4
To Mr. E. Lucky his Account current, for the Nt. Proceed, bad Debts excepted. —————	237.	11.	11

INVOYCE from PORTUGAL.

Oporto, Mar. 11. 174 .

Invoyce of Wine, laden $\frac{1}{2}$ Nich. Strong, and Owen Jamyn, on board the *Savanna*, John Snap, Master, for Account of P. Lily and Comp. and consign'd to Paul Ludolph and Comp. in Dantzick.

	Mill.	Reas.
P To Cost of 10 Pipes of Wine, bought of <i>Anth. de Minas</i> , at 16 M. $\frac{1}{2}$ Pipe, —————	160.	000
To Custom, at 1055 Reas $\frac{1}{2}$ Pipe, —————	10.	550
To Trimming, &c. at 400 Reas, —————	4.	000
To Primage, at 60 Reas $\frac{1}{2}$ Pipe, —————	0.	600
N^o To Brokage, at $\frac{1}{2}$ $\frac{1}{2}$ Cent. —————	0.	876
1 to 10. To Commission, at 3 $\frac{1}{2}$ Cent. —————	5.	280
To Port-Charges of the said Ship, —————	6.	380
Ex^o 40 Reas for 3 d. —————		
	187.	680

Errors excepted,

Answ. l. 58 . 13 Sterl.

 $\frac{1}{2}$ Nich. Strong, and Owen Jamyn.

[Primage and Average] are small Allowances made to the Master and Mariners of a Ship, at Lading, [Average] also the Contribution of Insurers, in Case of Loss; and sometimes the Assessment made upon the rest of the Lading, to make good that Part, which the Sailors cast over Board, in Stress of Weather, for the Security of the whole.

Contra

An Account of SALES.

93

Port-Royal in Jamaica, Anno. 174

Contra. _____ Cr. l. s. d.
 By Benjamin Eaton, sold him 2765 Ells of Ozenbrigs, Yards, at $8\frac{1}{2}d.$ ¢ Yard, _____
 By 1112 Yards of blue Linens, sold ditto, at $7\frac{1}{2}d.$ ¢ Yard, _____
 By James Smart, for 39 Yards of Cloth sold him, at 15 s. ¢ Yard, _____
 By Lawrence Nunke, sold him 40 Pair of Hofs, at 7 s. 10 d. ¢ Pair, _____
 By Ditto. for 175 Ells of Bag-Holland, at 6 s. 3 d. ¢ Ell. _____

Errors excepted, Apr. 16. 174
 ¢ Your humble Servant,

James Bradshaw.

INVOYCE from SPAIN

Laus Deo, in Cadiz, the 5th of Oct. 174

Invoyce of one Barrel Cont. one Seron of Cascarilla, ship'd on Board the Sevilla-Merchant, Capt. Jonathan Braddel, Commander, for Accompt and Risque, as ¢ Advice; and go consign'd to Mr. Abraham Randal, Merchant in London. the Mark as ¢ Margin, to Cost, &c. _____ Dr.

R

One Seron, Qt. Netto, 209 $\frac{1}{4}lb.$ of Cascarilla, at 9 Ps. $\frac{5}{8}$ ¢ lb. _____
 To Dispatch 4 Ps. $\frac{8}{8}$, is, _____ 32
 To Portage to the House, and Boats, _____ 4
 To Boat-hire, Aboard, _____ 8
 To Brokerage, at $\frac{1}{2}$ ¢ Cent. _____ 39 $\frac{1}{2}$

To my Commission, at $2\frac{1}{2}$ ¢ Cent. _____ 83 $\frac{1}{2}$
 378 $\frac{1}{2}$

At 8 Ryals of Plate, ¢ Ps. of $\frac{5}{8}$, what does the whole amount to, Ex^o. at 52 d. Sterl. ¢ Ps. of $\frac{5}{8}$?

Answ. l. 420 . 10 . 10 $\frac{1}{2}$.

Errors excepted,

James Langlow.

[Brokerage] is an Allowance to the Broker, to bring Persons to buy or sell Goods, &c. 8 . s . 82 . l.
 [To Balance an Accompt] is to make the Total of the Dr. and Cr. sides alike.

Invoyce

INVOICE from FRANCE.

Bordeaux, the 20th of Oct. 174 .

Invoice of $\frac{1}{2}$ a Tun of Wine, and 20 Ps. of Prunes, ship'd on the *Canary-Merchant*, *John King*, Master, for the
Account of *Valentine Austin*, Merchant in *London*, mark'd as in the Margin. *Liv. Sol. Den.*

To 2 Hhds of *Graves* Claret, at 50 Cr. ff Tun, 75 . 0 . 0

To 20 Ps. of Prunes, bought of Mr. *Tart* and Comp. Cont. viz.

N ^o 1. ——— 1000 lb.	N ^o 11. ——— 955 lb.	Fr. 97 $\frac{1}{2}$ lb. ff Cask.
2. ——— 1000	12. ——— 960	
3. ——— 1000	13. ——— 960	
4. ——— 1005	14. ——— 955	lb.
5. ——— 990	15. ——— 900	10 Qt.
6. ——— 995	16. ——— 925	Do.
7. ——— 955	17. ——— 950	
8. ——— 1045	18. ——— 981	Gr.
9. ——— 1000	19. ——— 930	Tr.
10. ——— 1000	20. ——— 1040	liv. sol. den.

17596 Nt. at 2 . 17 . 7 ff Quintal.

CHARGES.

W

To Custom and Brokerage of Wine, 20 liv. ff Ton,	<u>Liv. 10 . 0 . 0</u>
To Charges in buying, 15 sol. ff Tun,	<u>0 . 7 . 6</u>
To Sledage and Boatage of the said Wine,	<u>0 . 15 . 0</u>
To Custom of Prunes, liv. 4 . 15 ff Ps.	<u>95 . 0 . 0</u>
To Sledage and Boatage, 9 sol. ff Ps.	<u>9 . 0 . 0</u>
To the Ship Broker, for the Prunes, 10 sol. ff Ton,	<u>4 . 17 . 9</u>
To Average and Port's Box, 27 sol. ff Ton, Gr.	<u>13 . 3 . 10</u>

R

133 . 4 . 1

What *Sterl.* is Mr. *Austin* to charge himself with, on Account of this Factory, at 57 $\frac{1}{2}$ d. ff Cr. And what ought the Prunes to weigh at *London*, the Kintal or 100 l. *Bordeaux*, being 110 at *London*?

Ans. l. 58 . 2 . 8 Cwt. 172 . 3 . 7

To my Commission, at 2 $\frac{1}{2}$ ff Cent. 17 . 17 . 6

Liv.

Errors excepted.

Leon Mouson.

RECRE

R E C R E A T I O N XVI.

IF during the Tide of Ebb, a Wherry should set out from *London Westward*, and at the same Instant, another should put off at *Chertsey for London*, taking the Distance by Water at 34 Miles: The Stream forwards this, and retards the other, say $2\frac{1}{2}$ Miles an Hour: The Boats are equally laden, the Rowers equally good, and in the ordinary way of Working, in still Water, would proceed at the Rate of 5 Miles an Hour: The Question is, where in the River the two Boats would meet?

Answer $8\frac{1}{2}$ Miles from *London*.

There are 2 Pieces of Clock-work, which running with a Fly, will each of them lower a Weight uniformly, to the depth of 35 Feet: The first Weight, or *A*, descends $\frac{1}{10}$ of an Inch in an Hour; and when 'tis let down 12 Feet: The second, or *B*, is put off, and the Train of Wheels belonging to this Machine, is so order'd, that the Weights will be, in the same Level, 100 Inches before they come to the Bottom: the Velocity of *B*'s Descent is requir'd?

Answer $2\frac{1}{4}$ Inches $\frac{1}{4}$ Hour.

A. and *B*. truck, *A*. has 14 Cwt. 81 lb. of *Farnham Hops*, at 2l. 19s. $\frac{1}{4}$ Cwt. but in Barter, insists on three Guineas. *B*. has Wine worth 6s. $\frac{1}{4}$ Gall. which he raises in Proportion to *A*'s demand. On the Balance *A*. received but a Hogshead and a half of Wine: Pray what had he in ready Money.

Answer 16l. 2s. $1\frac{1}{2}$ d.

A Cistern holds 103 Gallons, and being brim full, has two Cocks to run off the Water; by the first of which, a three Gallon Pail, will be filled in 60 Seconds; by the other in 75 Seconds: In what time will this Cistern be emptied, thro' both these Apertures together, supposing the Efflux of the Water all along the same?

Answer 19 Minutes, $4\frac{1}{2}$ Seconds.

A. of *Amsterdam*, owes *B*. of *Paris*, 2000 Florins of current Specie, which he is to remit him, by Order, the Exchange $90\frac{1}{2}$ d. *Flem. de Banco*, $\frac{1}{4}$ Crown of 60 Solz *Tournois*, the *Agio* of the Bank being $4\frac{1}{4}$ Cent. better than Specie; but when this was to be negotiated, the Exchange was down at $89\frac{1}{2}$ d. $\frac{1}{4}$ Crown, and the *Agio*, let us suppose, rais'd to 5 $\frac{1}{4}$ Cent. What did *B*. get by this Turn of Affairs?

Answer 10 Cr. 18s. 9d.

Sound, not interrupted, is by Experiments found uniformly to move about 1150 Feet in a Second of Time: How long then after firing the Warning-gun in *Hyde-Park*, may the same be heard at *Highgate*, taking the Distance at $5\frac{1}{2}$ Miles?

Answer 23 Seconds, 54 Thirds.

If I see the Flash of a Piece of Ordnance, fir'd by a Vessel in Distress at Sea, which happens, we'll suppose, nearly at the Instant of its going off, and hear the Report a Minute and 3 Seconds afterwards: How far is she off, reck'ning for the Passage of Sound, as before?

Answer 13 Miles, 5 Furl. and 31 Poles, nearly.

The Quantity of Matter contain'd in all *Spheres*, is directly in Proportion to the Cubes of their Diameters; if then a Bullet of Cast-iron, 4 Inches Diameter, weighs experimentally 9 lb. what is the Difference of the Weight of one that is $13\frac{1}{2}$ Inches, and another that is no more than $7\frac{1}{2}$ Inches?

Answer About 287 lb.

If the Diameter of the Earth is 7970 Miles, of the Moon 2170 Miles, supposing them both to be exact Spheres, as they are not: what Comparison is there between them in Point of Magnitude?

Answer The Earth is 49,5446 times bigger than the Moon.

A. and *B.* on opposite Sides of a Wood 134 Toises about. They begin to go round it both the same way at the same Instant of Time, *A.* goes 11 Toises in 2 Minutes, and *B.* 17 in 3: The Question is how many times will they surround this Wood before the nimbler overtakes the slower?

Answer 17 times.

There are three Orders of Leavers, or three Varieties, wherein Weights, Props and Moving-Powers may be differently applied to the Vectis, or inflexible Bar, in order to effect Mechanical Operations in a convenient Manner. The first hath the Power placed at one of its Ends, the Weight to be raised is put at the other, and the Prop is somewhere between. A Leaver of the second Order, has the Power also at one End, the Prop is fixed directly at the other, and the Weight somewhere between them. Where the Prop is planted at one End of the Bar, the Weight at the other, and the Moving-Force is applied somewhere between, 'tis then a Leaver of the third Order.

If a Leaver, 40 effective Inches long, will by a certain Power, thrown successively thereon, in 13 Hours, raise a Weight 104 Foot: In what time will 2 other Leavers, each 18 effective Inches long, raise an equal Weight 73 Foot; the Force of streight Leavers being in a direct Proportion of their Lengths?

Answer 10 Hours $8\frac{1}{2}$ Min.

A Leaver of the first Order equally divided, and justly poised, is the Balance-Beam: To this, if a Power be applied at one End, 'twill always move an equal Weight at the other. In like manner; a Leaver equally poised, and unequally divided, having a Power applied at one End, will move a Weight at the other which will be reciprocally proportionable to the Distances of those Ends from the Fulcrum, or Point supported: Of this kind is the Steel-yard. What Weight then hung on, at 70 Inches distance from the Prop of this Machine, will equipoise a Hoghead of Tobacco of $9\frac{1}{2}$ Cwt. freely suspended at two Inches distance on the contrary Side?

Answer 30 $1\frac{1}{2}$ lb.

Again: What Weight will a Fellow be able to raise, who presses with the Force of a Hundred and a half, on the End of an equipoised Hand-spike 100 Inches long, which is to meet with a convenient Prop, exactly $7\frac{1}{2}$ Inches above the nether End of that Machine?

Answer 2072 lb.

In

In giving Directions for making an *Italian Chair*, the Shafts whereof were settled at 11 Foot, between the Axle-Tree, whereon the principal Bearing is, and the Back-band, by Means of which the Weight is partly thrown upon the Horse; a Dispute arose whereabouts on the Shafts the Centre of the Body of this Machine should be fix'd, The Coach-Maker advised this to be done at 30 Inches from the Axle: Others were of Opinion, that at 24 'twou'd be a sufficient Incumbrance to the Horse. Now, admitting the two Passengers, with their Baggage, ordinarily to weigh 2 *Cwt.* a-piece, and the Body of the Vehicle to be about 70 *lb.* more: Pray what will the Beast, in both those Cases, be made to bear, more than the Harness; observing only that these Shafts are no other than Leavers of the second Order, and that the Weight to be supported will always be reciprocally as the Distance of the Centre of the Machine's Gravity shall be from the Prop and Moving Power?

Answer, $117 \frac{8}{11}$ *lb.* in the former, and $94 \frac{2}{11}$ *lb.* in the second Case.

A Person with a Hand-spike 100 Inches long, is said, in the last Proposition save one, by bearing on the upper End on't, with the Force of 168 *lb.* to sustain 2072 *lb.* at the other, a convenient Prop being pitched $7 \frac{1}{2}$ Inches above it. If now we change the Nature of the Leaver, and bearing on the Pavement with the nether End, we suppose the Weight to be moved, presses at $7 \frac{1}{2}$ Inches, or where the Prop in the other Case was fixed, and the Hand lifting at the upper End with the Force of 168 *lb.* as before; the Question is, what Difference there will be in point of Power, between these different Applications of the same Leaver?

Answer, The Power gain'd in either Case will be as 37 to 3, exactly the same. A Person is capable indeed generally of lifting more than his own Weight: The latter Application seems to be the more advantageous on that Account; but when equal Forces are applied to Leavers of the first two Orders, *cæteris paribus*, equal Effects will be produced.

A Water-wheel turns a Crank, working 3 Pumps, fixed just 6 Foot from the Joint or Pin, by which their several Leavers, each 9 Foot in Length, are fasten'd, for sake of the intended Motion, at one End; the Suckers of the Pumps being work'd by the other, shews them to be Leavers of the third Order. Now, I wou'd know what the Length of the Stroke in each of the Barrels will be, if the Crank be made to play just 9 Inches round its Centre?

Answer, 27 Inches.

Once more: With what Force ought that Water-wheel to be driven, which, circumstanced as above, raises 3 Cubic Foot of Water at every Revolution of the Wheel, each experimentally weighing $62 \frac{1}{2}$ *lb.* *Avoirdupoiz*, the Friction included?

Answer, Without forcing it any higher, the Lift must be $281 \frac{1}{2}$ *lb.*

A Weight of $1 \frac{1}{2}$ *lb.* laid on the Shoulder of a Man, is no greater a Burthen to him, than its absolute Weight, or 24 Ounces: What difference will he feel, between the said Weight applied, near his Elbow, at 12 Inches from the Shoulder, and in the Palm of his Hand, 28 Inches therefrom; and how much must his Muscles draw to support it at Right Angles; that is, having his Arm extended right out?

Answer 24 *lb.* *Avoirdupoiz.*

INVOYCE from ITALY.

Factory of the Cost and Charges of one hundred Barrels of Anchovies, ship'd on Board the *Tortois*, Capt. *James Snat*, for Accompt of Mr. *Samuel Tanqueray*, of *London*, Merchant; and consign'd himself, under Mark d Margin.

	Liv.	Sol.	Den.
To prime Cost of said 100 Barrels of Anchovies, at Ps. $\frac{3}{4}$ d Bar. $2\frac{1}{2}$	1650	.	.
To Portage and Ware-house, _____	Liv.	6	0
To Jeffering with Cooper's Pains, _____	15	0	0
To Ware-house Room and Leviation, _____	25	0	0
To Portage and Boatage aboard, _____	20	0	0
To Brokerage, $\frac{1}{2}$ d Cent. _____	8	5	0
To Primage, _____	5	0	0
	79	5	.
To my Provision, 3 d Cent. _____	51	17	6
	Liv.		

Livorn, Nov. 26. 174

At 115 Solz d Ps. of $\frac{3}{4}$, for how much Sterl. may Mr. *Tanqueray* credit his Factor, Ex^o at 4 s. 6 d. Sterl. d Ps. of $\frac{3}{4}$?

Errors Excepted,

Ans^r. l. 69 . 13 . 11

d Emanuel Lutzena.

[Italy changes upon the Dollar; containing at Leghorn 6 Livres; at Genoa but 5.]

A LETTER of ADVICE; to Mess. *Edw. Martin* and *Tho. Harvey*.

Sirs,

Hamburgh, Apr. 10. 174

THIS is to advise you, that I have ship'd on Board the *Marigold*, *John Getall*, Master; 10 Rolls of Ozna-brigs; 25 Barrels of Mum; and 16 Cwt. of Latten Wire, for your proper Accompt and Risque; amounting to, as d inclos'd Invoyce, 5833 Marks *Lubeck*, at 16 s. *Lubeck* each Mark. Ex^o. at 152 s. *Lubeck*, for 20 s. Sterl. from,

Your humble Servant,

This Consignment makes in Sterl. l. 614

James Jermin.

Invoyce,

INVOYCE from LONDON.

99

Invoyce, or Factory of 6 Hhds. of Tobacco; and 3 Bales of Woollen Cloth, ship'd on board the *Streights-Merchant*, *Theophilus Throughpaid* Master, for the proper Accompt and Risque of *Nicol. Neapolitano*, Merchant in *Leghorn*, and consign'd himself, mark'd and number'd as under. Contents, Cofts, and Charges, viz.

Best bright Tobacco, 6 Hhds, viz.

	Cwt.	qr.	lb.		qr.	lb.		Cwt.	qr.	lb.		qr.	lb.		
N ^o 1.	Qt.	2	3	7	Tr.	2	14	N ^o 4.	Qt.	4	1	27	Tr.	3	4
2.	—	3	1	10	—	2	20	5.	—	2	2	20	—	2	10
3.	—	3	3	0	—	2	0	6.	—	5	2	10	—	3	12
		9	3	17	1	3	6			12	3	1	2	0	26
		12	3	1									1	3	6
Total, Gr.		22	2	18				Tot. Tr. Cwt.		4	0	4			
		4	0	4											

Cwt. 18 . 2 . 14 Suttle, 2086
Tr. — — — Tret, 80

lb. 2006 Nt. at 7 $\frac{1}{2}$ d. ₤ Pound. — — — l.

Cloth, 3 Bales, viz.

N^o 27, 28, 29. Qt. each 10 short Cloths, at 12 l. ₤ Cloth. — — — l.

Charges, viz.

NN To Custom of all — — — l. 53 . 18 . 6
To Cost of 3 Wrappers, — — — 0 . 10 . 6
Brokerage, at $\frac{1}{2}$ ₤ Cent. — — — 2 . 2 . 3
Storage, — — — 1 . 0 . 0
Cartage and Portorage, — — — 0 . 10 . 6

To my Commission, at 2 $\frac{1}{2}$ ₤ Cent. 12 . 0 . 4

Laus Deo, London, Aug. 4. 174 .

Errors excepted, l.

N 2

₤ Ship's Husband.

ACCOMPTS CURRENT.

Bordeaux, Anno 174 .

Mr. Valentine Austin, —————

Dr.

Liv. Sol. Den.

Oct. 20.	To Cost and Charges of 20 Ps. of Prunes, with $\frac{1}{2}$ Tun of Wine, ship'd ff the Canary-Merchant, John King, Master, as ff Invoice sent	732 . 13 . 10
	To my Bill of 70 Cr. 5 Sol. remitted him on Mr. John Strong, at $1\frac{1}{2}$ Usance, at $55\frac{1}{2}d$.	210 . 5 . 0
	ff Cr. is,	1291 . 1 . 6
Dec. 7.	To Cost and Charges of 10 Ps. of Brandy, ship'd ff Edward Shaw, as ff Invoice, —	44 . 15 . 0
Jan. 10.	To Cost and Charges of one Tierce of White-Wine, $\frac{1}{2}$ Hhd. of Vinegar, ship'd on the True-Love of Yarmouth, Nich. Rope, Master, —	1 . 16 . 0
	To Postage of Letters to this Day, —	18 . 4 . 8
Feb. 16.	To Balance transfer'd to your Credit in new Accompt, —	

Errors excepted, Liv. 2298 . 16 . 3

Mr. Anthony Fountain, —————

Dr.

174 .		Cwt.	qr.	lb.		Nt. at l.		
Mar. 26.	To Raisins, 19 Barrels,	wt. 72 . 2 . 3				1 . 16 . 0	—	l.
Apr. 5.	To Figs, 12 Barrels,	9 . 3 . 14				1 . 4 . 6	—	
17.	To Sugar, 3 Hhds.	31 . 2 . 12				1 . 12 . 6	—	
Jun. 16.	To Currans, 3 Butts,	64 . 1 . 0				1 . 16 . 8	—	
Jul. 11.	To Tobacco, 5 Hhds.	17 . 1 . 15				5 . 10 . 7	—	
Aug. 5.	To Wormseed, 1 Bale,	15 . 2 . 22				2 . 14 . 6	—	

l.

[To Consign Goods] Is when a Merchant, or Factor, sends Goods directed to his Correspondent or Employer.

[An Accompt of Sales] Specifies the Sale of Goods receiv'd from your Employer, with the Charges on Receipt, and their Net Proceed.

Bordeaux,

ACCOMPTS CURRENT.

101

Bourdeaux, Anno 174 .

Contra

Cr.

Liv. Sol. Den.

Oct. 30.	By my Bill on him in Favour of Mr. Francis Amot, of 312 Cr. 11 Sol. at 2 Usance, at 55 $\frac{1}{2}$ d Cr. -----	936 . 11 . 0
Dec. 14.	By his Remittance at 10 Days Sight, of 270 Cr. on Messieurs Power and Jean Larson, -----	810 . 0 . 0
15.	By his Remittance, at eight Days Sight, 185 Cr. on Mr. Richard Lee, of Rochel, negotiated at $\frac{1}{2}$ d Cent. loss with Mr. Strange, -----	552 . 5 . 0
The 19th of Feb. 174 .		Liv. 2298 . 16 . 0

By your humble Servant,

Leonard Mouson.

Contra

Cr.

174 .		
Apr. 19.	By Cash, receiv'd of Capt. John Marlow, -----	L 45 . 16 . 10
May 16.	By ditto, for a Bill of 419 Guilders, Exchange at 34 s. 6 d. Fl. -----	
19.	By a Bill of 957 Liv. 10 Sol. Exchange, at 57 $\frac{1}{2}$ d. d Crown. -----	
Jun. 14.	By Cash, receiv'd of Mr. Richard Perry, -----	104 . 15 . 7
24.	By a Bank of England-Note, -----	76 . 10 . 0
	By Balance due to me, -----	107 . 2 . 4

[An Accompt Current] is that, wherein your Correspondent is made D^r. for whatever he ought to make good or allow, and Cr. for what ought to be allow'd or made good to him; and is an Accompt that sums up the Heads of your Dealing with him, and decides how Affairs stand betwixt you, to the Time of its being made out.

RECRE.

RECREATION XVII.

IT is conceived, that the Effects or Degrees of *Light*, *Heat*, and *Attraction*, are reciprocally proportional to the Squares of their Distances from the Centre, whence they are propagated: Supposing then, the Earth to be 81000000 Miles distant from the Sun, I would know at what Distance from him another Body must be plac'd, so as to receive *Light* and *Heat*, double to that of the Earth?

Answer, 57275650 Miles nearly.

Suppose, with Dr. Keil, the Distance of the Sun to be from us, 115 of his Diameters: How much hotter is it then at the Surface of the Sun, than under our Equator?

Answer, By 13225 Degrees.

The Distance between the Earth and Sun is accounted 81000000 of Miles; the Distance between *Jupiter* and the Sun 424000000 of Miles: The Degree of *Light* and *Heat*, receiv'd by *Jupiter*, compar'd with that of the Earth, is requir'd?

Answer, $\frac{5561}{175778}$, or about $\frac{1}{31}$ of the Earth's *Light* and *Heat*.

Mercury, the nearest of the Planets to the Source of Heat, *Light* and *Life*, in our System appointed, the Sun is about 32 Millions of Miles from him; *Saturn*, the remotest of the Planets, is usually distant about 777 Millions of Miles: What Comparison or Proportion is there between the Solar Influences on these two Bodies?

Answer, As 1024 to 603729.

A certain Body on the Surface of the Earth, weighs 112 lb. the Question is, whither this Body must be carried, that it may weigh but 10 lb.

Answer, To 3,3466 Semi-diameters from the Earth's Centre.

If a Body weighs 16 Ounces upon the Surface of the Earth, what will its Weight be 50 Miles above it, taking the Earth's Diameter at 7970 *English* Miles?

Answer, 15 Ounces, 9 Dr. $\frac{412103}{831149}$.

The less porous a Body is, the greater its Density; now the Moon's Density or Compactness, is to that of the Earth, as $123\frac{1}{2}$ to 100: What Proportion then is there between the Quantity of Matter in the Earth, and that in the Moon?

Answer, There is $40\frac{117}{1000}$ times more Matter in the Earth, than in the Moon.

The Cubic Inch of Marble is 1,5688 Oz. *Avoirdupois*; what Difference is there, in point of Weight, between a Figure, containing a solid Foot and half of Stone, and another of equal Dimensions in Brass, 4,63 Ounces whereof make a Cubic Inch?

Answer, Cwt. 4 : 1 : 19

The

The Sum Total of any Rank of Numbers equally increafing, is found by multiplying the Sum of the firft and laft, by half the Number of Terms.

How many Strokes do the Clocks of *Venice* (which go on to 24 o'Clock) ftrike in the Compafs of a Natural Day?

Answer, 300.

The Length of my Garden is 94 Feet; now if Eggs be laid along the Pavement a Foot afunder, and be fetch'd up fingly to a Basket, remov'd one Foot from the laft; how much Ground muft he traverse that does it?

Answer, 1 Mile, 5 Furl. 21 Pol. $3\frac{1}{2}$ Feet.

By multiplying 16 Feet, the Defcent of an heavy Body, near the Earth's Surface, in one Second of Time, by as many of the odd Numbers, beginning from Unity, as there are Seconds in any given Time, viz. by 1 for the firft; 3 for the fecond; 5 for the third; 7 for the fourth, and fo on; the Sum total will give the Space it has pafs'd, any where on this Side the Centre of the Earth, in that Time: Suppose a Stone let go into an Abyfs, fhould be ftopp'd at the End of the 11th Second, after its Delivery, what Space would it have gone thro'?

Answer, 1936 Feet.

It may alfo be prov'd, that the Velocities acquir'd by Bodies in falling, are in Proportion to the Squares of the Times in which they fall. For Instance, let go 3 Bullets together; ftop the firft at one Second, it will have pafs'd 16 Feet as before: Stop the next at the End of the fecond, it will have fallen four-times 16 Feet, or 64; and ftop the laft at the third Second, and the Distance will be 144, or 9 times 16; and fo forward.

What then is the Difference between the Depth of two Wells, into each of which, fhould a Stone be drop'd at the fame Instant, one will meet with the Bottom at 6 Seconds, the other at 10?

Answer, Difference, 1024 Feet.

If a Stone be $19\frac{1}{2}$ Seconds, in defcending from the Top of a Precipice to the Bottom; what is the Height of the fame, according to the foregoing Canon?

Answer, 1014 Fathoms.

On the contrary; to determine in what Time a heavy Body will, by Vertue of its natural Tendency towards the Centre of the Earth, reach any Place assign'd, on this Side of the fame; fay, as 16 Feet are to the Square of one Second or 1, fo is any given Distance, or to the Square of the Seconds requir'd.

In what Time will a Musquet-Ball, drop'd from the Top of *Salisbury* Steeple, faid to be 400 Feet high, be at the Bottom?

Answer, 5 Seconds.

If a Hole could be bor'd through to the Centre of the Earth, and the half Diameter of this Planet was prov'd to be 3923 times 5000 Feet; in what Time, after the Delivery of a heavy Body on its Surface, would it arrive at its Centre?

Answer, 18 Min. 27 Sec. and $\frac{1}{4}$ nearly.

The Length of Pendulums are to one another reciprocally, as the Squares of the Number of their Vibrations, made in the same Space of Time. If then a Pendulum, 39,2 Inches long, in our Latitude, swings Seconds, or 60 times in a Minute; what Difference is there between the Length of one, that vibrates half Seconds, or 120 times in a Minute; and another, that swings double Seconds, or 30 times a Minute?

Answer, 12 Feet, 3 Inches.

Again; what Difference will there be in the Number of Vibrations, made by a Pendulum of 6 Inches long, and another of 12 Inches long, in an Hour's Time?

Answer, 2695, 14.

Observ'd, that while a Stone was descending to measure the Depth of a Well, a String and Plumet (that from the Point of Suspension, or the Place where 'twas held, to the Centre of Oscillation, or that Part of the Bob, which being divided by a circular Line struck, from the Centre abovesaid, would divide it into two Parts of equal Weight) measur'd just 18 Inches; had made 8 Vibrations: Pray, what was the Depth, allowing (1150 Feet $\frac{1}{2}$ Second) for the Return of Sound to the Ear?

Answer, about 400 Feet.

The Sum Total of any Rank of Numbers, not equally progressive, but multiply'd from first to last, by one common Factor, may be universally found, by multiplying the last of the Terms, by the common Multiplier, and from the Product, deducting the first Term, divide the Remainder by the said Multiplier less 1; the Quotient will be the Total sought.

On *New Year's Day*, a Gentleman married, and receiv'd of his Father-in-Law a Guinea, on Condition, that he was to have a Present, on the first Day of every Month, for the first Year, which should be double still to what he had the Month before: What was the Lady's Portion?

Answer, 4299 l. 15 s.

One at a Country Fair had a mind to a String of 20 fine Horses; but not caring to take them at 20 Guineas a-head, the Jockey consented, that he should, if he thought good, pay but a single Farthing for the first, doubling it only to the 19th, and he'd give him the 20th into the Bargain: This being presently accepted, how were they sold?

Answer, at 27 l. 6 s. 1 $\frac{1}{2}$ d. each.

What is an Annuity, to expire in a dozen Years, worth, discounting 10 $\frac{1}{2}$ Cent. $\frac{1}{2}$ Annum, by compound Interest?

Answer, 6 Years, 297 Days Purchase.

What ought a Man to give down, in ready Money, for the Reversion of 1000 l. a Year, to continue 20 Years on a Lease, which cannot commence till five Years are at an End, allowing the Purchaser Compound Interest at 6 $\frac{1}{2}$ Cent.

Answer, 8571 l. : 0 : 7 $\frac{1}{2}$ d.

The

The FORMS of certain LAW PRECEDENTS, which more frequently occur in the Way of Business.

An *English* BOND, to which may be put any CONDITION.

K NOW all Men by these Presents, That I [*Benjamin Bidfair* of *Stepney*, in the County of *Middlesex*, *Rope-Maker*] am held and firmly bound to [*William Wellmeant* of *Sutton-Colefield*, in the County of *Warwick*, Esq;] in one hundred Pounds, lawful Money of *Great Britain*; to be paid to the said [*William Wellmeant*] his certain Attorney, Executors or Administrators: For the Payment whereof, I bind my self, my Heirs, Executors and Administrators, firmly by these Presents: Seal'd with my Seal. Dated this [*first Day of September*] in the [*seventh*] Year of the Reign of our Sovereign Lord [*GEORGE THE SECOND*] by the Grace of God, of *Great Britain, France, and Ireland* [*KING*] Defender of the Faith, and so forth. And in the Year of our LORD [*one Thousand seven Hundred and Forty*].

A CONDITION for Money lent.

THE Condition of this Obligation is such, that if the above bounden [*Benjamin Bidfair*] his Heirs, Executors or Administrators, do well and truly pay, or cause to be paid, unto the above-mention'd [*William Wellmeant*] his Executors, Administrators, or Assigns, the full Sum of [*fifty Pounds*] of good and lawful Money of *Great-Britain*, on the [*first Day of November*] next ensuing the Date hereof, with lawful Interest for the same; then this Obligation to be void, or else to remain in full Force.

Seal'd and Deliver'd (being first
legally Stamp'd) in Presence
of *A. B. C. D.*

Benjamin Bidfair, (L. S.)

When a Bond is given, in Consideration of the Value receiv'd, the Obligation is always to be made for double the Value in the Condition.

What is to be varied and made agreeable to Circumstances, is in these Precedents inserted between [] and in a different Character.

The Dates of legal Instruments, Sums of Money, and the Number of all other Things specified in them, must be written in Words at Length, never in Figures, for fear of Alterations. The Instruments themselves, as well as all Proceedings at Law, must be written wholly in English, according to a late Act of Parliament.

A CONDITION to stand to the AWARD of Arbitrators.

THE Condition of this Obligation is such, That if the above bounden [*Benjamin Bidfair of London, Merchant*] his Heirs, Executors, and Administrators, and every of them, do and shall in all Things, well and truly stand to, obey, abide by, perform, fulfil, and keep the Award, Order, Arbitrament, final End and Determination of [*Anthony Aimiwell, and Michael Makepeace of London, Merchants*] Arbitrators indifferently nam'd, elected, and chosen, as well on the Part and Behalf of the above bounden [*Benjamin Bidfair*] as of the above named [*William Wellmiant*] to arbitrate, award, order, judge and determine of, and concerning all manner of Action and Actions, Cause and Causes of Actions, Suits, Bills, Bonds, Specialties, Judgments, Executions, Extents, Accompts, Debts, Dues, Sum and Sums of Money, Controversies, Trespasses, Damages and Demands whatsoever; at any time or times heretofore had, made, moved, brought, commenced, sued, prosecuted, done, suffered, committed, or depending by or between the said Parties, so as the Award may be made and given up in Writing, under their Hands and Seals, ready to be deliver'd to the said Parties, on or before the [*first of February next ensuing the Date hereof.*] But if the said Arbitrators do not make such their Award, of and concerning the Premises, by the time aforesaid; that then, if the said [*Benjamin Bidfair*] his Heirs, Executors and Administrators, for his and their Parts and Behalf, do in all Things, well and truly stand to, obey, abide by, perform, fulfil, and keep the Award, Order, Arbitrament, Umpirage, final End and Determination of [*Ferdinando Finisbal of London, Esq;*] Umpire indifferently chosen between the said Parties, to end the said Matter and Differences, so as the said Umpire do make his Award or Umpirage of, and concerning the Premises, and deliver the same in Writing, under his Hand and Seal, to the said Parties, on or before the [*sixth Day of February*] next, ensuing the Date aforesaid: Then this Obligation to be void, or else to remain in full Force.

Seal'd and Deliver'd (being legally
Stamp'd) in the Presence of,
A. B.
C. D.

Benjamin Bidfair, (L. S.)

Both Parties are, in this Case, to be mutually bound, and if there be no Umpire admitted, the latter Part of the Condition, beginning [But if the said Arbitrators] is to be omitted.

A Clause ought to be added to this Instrument, and sign'd by either Party, directing such Award to be enter'd, and given as a Plea, in either of the King's Courts in Westminster, in order to corroborate and render it final to them.

The

The FORM of an UMPIRAGE of Award.

TO all People, to whom this present Writing shall come: I [*Ferdinando Finisbal* of *London*, Esq;] Umpire indifferently chosen between [*Benjamin Bidfair* and *William Welmeant* of *London*, Merchants] send Greeting. Now know ye, that I the said *Ferdinando Finisbal*, having deliberately heard, consider'd, and understood the Grievs, Allegations, and Proofs of both the said Parties; and being willing, as much as in me lieth, to set the said Parties at Unity and good Accord, do by these Presents, Arbitrate, Award, Order, Deem, Decree and Judge, that the said [*Benjamin Bidfair*] his Executors, Administrators or Assigns, do and shall, well and truly pay, or cause to be paid, unto the said [*William Welmeant*] his Executors, Administrators or Assigns, the full Sum of [*one hundred Pounds*] of lawful Money of *Great-Britain*, on the [*17th Day of March*] next, ensuing the Date of these Presents; and that upon Payment thereof, the said [*Benjamin Bidfair* and *William Welmeant*] shall, at their own proper Costs and Charges, seal, subscribe, and as their several Acts and Deeds, deliver each to the other a general Release in Writing, of all Matters, Actions, Suits, Causes of Actions, Bonds, Bills, Covenants, Controversies and Demands whatsoever; from the Beginning of the World, to the [*first Day of May last past*] and in the [*sixth*] Year of our Sovereign [*Lord GEORGE, KING of Great-Britain, &c.*] In Witness whereof, I have hereunto set my Hand and Seal, the [*fourth Day of February, in the Year of our LORD, one Thousand seven Hundred and Forty* .]

Seal'd and Deliver'd (being duly
Stamp'd) in Presence of,

E. F.
G. H.

Ferdinando Finisbal, (L. S.)

A LETTER of LICENCE to a Debtor.

TO all People, to whom this present Writing shall come: We whose Names are here under subscrib'd, and Seals affix'd, Creditors of [*A. B.* of *London*, Merchant] send Greeting. Whereas, the said [*A. B.*] on the Day of the Date of these Presents, is indebted unto us severally, in divers considerable Sums of Money; which at present he is not able to satisfy unto us, without Respite and Time to be given him, for the Payment thereof: Know ye therefore, That we the said Creditors, for divers good Causes and Considerations, us thereunto moving, have given and granted, and by these Presents, do give and grant unto the said [*A. B.*] our sure and safe Conduct, and free
Licence,

A LETTER of LICENCE to a Debtor.

Licence, that he the said [A. B.] shall, and may safely come and go, and resort unto us, and every one of us, his said Creditors, to compound and take Order with us; and every one of us, for all and every of our said Debts, and may go about any other Business, to any other Person or Persons whatsoever, without any Trouble, Suit, Arrest, Attachment, or other Molestation to be offer'd or done unto him, the said [A. B.] his Wares, Goods, Moneys, or other Merchandizes whatsoever, by us or any of us, or by the Heirs, Executors, Administrators, Partners or Assigns of us or any of us, or by our or any of our Means and Procurement, to be sought or procur'd to be done, from the Day of the Date hereof, unto the full End and Term of [one whole Year] next ensuing. And we the said Creditors, whose Names are here under-written, do hereby Covenant and Grant, and every one of us for his own Part, his Executors and Administrators, covenanteth and granteth, to and with the said [A. B.] that if any Trouble, Wrong, Damage or Injury, shall be done unto him the said [A. B.] either in his Body, Goods or Chattels, or any of them, within the said Term of [one Year] next coming after the Date hereof, by us or any of us, his said Creditors, or by any other Person or Persons, by or through the Procurement, Consent, or Knowledge of us or any of us, contrary to the true Intent and Meaning of this our present Writing of safe Conduct; that then the said [A. B.] by Vertue of these Presents, shall be discharg'd and acquitted for ever, towards and against him and them, of us, his and their Heirs, Executors, Administrators, Partners or Assigns, and every one of them, by whom, and by whose Means, he shall be arrested, troubled and attached, or damnify'd, of all manner of Actions, Suits, Quarrels, Debts and Demands, either in Law or Equity, from the Beginning of the World, to the Day of the Date hereof: *In witness whereof*, we have hereunto set our Hands and Seals the [fourth Day of May, in the Year of our LORD, one Thousand seven Hundred and Forty .]

Seal'd and Deliver'd (being first duly
Stamp'd) in Presence of,

R. S.
W. X.

A. B. (L. S.)
C. D. (L. S.)
E. F. (L. S.)
G. H. (L. S.)
I. K. (L. S.)
S. P. (L. S.)
L. W. (L. S.)

R. D. (L. S.)
P. Q. (L. S.)
E. L. (L. S.)
M. T. (L. S.)
Y. Z. (L. S.)
W. N. (L. S.)

RECREA

RECREATION XVIII.

i. IF the Quantities of Matter in any two or more Bodies, put in Motion, be equal, the Forces wherewith they are moved will be in Proportion to their Velocities.

2. If the Velocities of these Bodies be equal, their Forces will be directly as the Quantities of Matter contained in them.

3. If both the Quantities of Matter and the Velocities be unequal, the Forces with which Bodies are mov'd, will be in a Proportion compounded of the Quantities of Matter they contain, and of the Velocities wherewith they move.

The Battering-Ram of *Vespasian*, weigh'd, suppose 100000 *lb.* and was mov'd, let us admit, with such a Velocity, by Strength of Hands, as to pass through 20 Feet in one second of Time, and this was found sufficient to demolish the Walls of *Jerusalem*; with what Velocity must a Bullet, that weighs but 30 *lb.* be mov'd, in order to do the same Execution?

Answer, 66666 $\frac{2}{3}$ Feet in a Second.

There are two Bodies, the one contains 25 times the Matter of the other (or is 25 times heavier) but the lesser, moves with 1000 times the Swiftneſs of the greater; in what Proportion are the Forces by which they are mov'd?

Answer, The leſs is mov'd with a Force 40 times greater than the other.

In comparing the Motions of Bodies, the *Ratio*, or Proportion between their Velocities, will be compounded of the direct *Ratio* of the Forces wherewith they are mov'd, and the reciprocal of the Quantities of Matter they contain.

A Body, weighing 20 *lb.* is impell'd by ſuch a Force as to ſend it 100 Feet in a Second; with what Velocity would a Body of 8 *lb.* Weight move, if it were impell'd by the ſame Force?

Answer, 250 Feet in a Second.

There are two Bodies, one of which weighs 100 *lb.* the other 60, but the leſſer Body is impell'd by a Force 8 times greater than the other; the Proportion of the Velocities wherewith theſe Bodies move, is requir'd?

Answer, The Velocity of the greater to that of the leſs, as 3 to 40.

There are two Bodies, the greater contains 8 times the Quantity of the Matter in the leſs, and is mov'd with a Force 48 times greater; the *Ratio* of the Velocities of theſe two Bodies is requir'd?

Answer, The greater to the leſs, as 6 to 1.

1. In comparing the Motions of Bodies ; if their Velocities be equal, the Spaces describ'd by them shall be in the direct Proportion of the Times in which they are describ'd.

2. If the Times be equal, then the Spaces describ'd will be as their Velocities.

3. If the Times, and the Velocities be unequal, the Spaces will be in a Proportion, compounded of the Times and Velocities.

There are two Bodies, one of which moves 40 times swifter than the other ; but the swifter Body has mov'd but one Minute, whereas the other has been in Motion two Hours : The *Ratio* of the Spaces describ'd by these two Bodies, is requir'd ?

Answer The swifter to the slower, as 1 to 3.

Again, supposing one Body to move 30 times swifter than another, as also the swifter to move 12 Minutes, the other only 1 : What Difference will there be between the Spaces by them describ'd, supposing the last has mov'd 60 Inches ?

Answer 1795 Feet.

In comparing of Motions ; the *Ratio* of the Times is compounded of the direct *Ratio* of the Spaces describ'd, and the reciprocal of the Celerities. There are two Bodies, one whereof has describ'd 50 Miles, the other only 5 ; the first had mov'd with 5 times the Velocity of the second : What is the *Ratio* then of the Times they have been describing those Spaces ?

Answer As 2 to 1.

When an heavy Body is weigh'd in any Fluid, it loses therein so much of its Weight, as an equal Bulk of that Fluid is found to weigh. Upon this Principle, suppose then, a cubic Inch of Standard Gold in the Air, weighs 10 Ounces *Troy*, and that by Experiments, a solid Inch of fresh Water is found to weigh 256 Grains *Troy* : What will a Gold Chain weigh in Water, that raises a Fluid an Inch in a Vessel, 3 Inches square, when put into it ?

Answer 85 Ounces 4 Dwts.

Again ; as the cubic Inch of Silver is found to be about 4,444 Ounces *Troy*, lighter than one of Gold, supposing the Workman had adulterated the said Chain with 14 Ounces and a half of Silver : How much higher would the Water, upon its Immersion, have been raised in the said Vessel ?

Answer ,28996 of an Inch.

Hiero King of *Sicily*, order'd his Jeweller to make him a Crown, containing 63 Ounces of Gold. The Workman thought, substituting part Silver therein, a proper Perquisite ; which taking Air, *Archimedes* was appointed to examine it, who, on putting it into a Vessel of Water, found it rais'd the Fluid, or that itself contain'd 8,2245 cubic Inches of Metal ; and having discover'd, that the cubic Inch of Gold weigh'd 10,36 Ounces, and that of Silver but 5,85 Ounces, he, by Calculation, found what Part of his Majesty's Gold had been changed : And you are desir'd to repeat the Process.

Answer $\frac{1}{16}$ Alligation 26,9 Ounces.

In the Walls of *Balbec* in *Turkey*, the ancient *Heliopolis*, there are three Stones laid end to end, now in Sight, that measure in Length 61 Yards ; one of which in particular is 63 Foot long, 12 Foot thick, and 4 Yards over : Now if this Block was Marble, every cubic Inch of which is at least an Ounce and half in weight ; what Power wou'd balance it, so as to prepare it for moving ?

Answer 659 $\frac{1}{16}$ Tons, the Burthen of a good *East-India* Ship.

A General RELEASE.

III

The cubic Inch of common Glas weighs about 1,36 Ounces *Troy*; *D^o*. of Salt Water ,5427; and of Brandy ,48926 *D^o*. Suppose a Seaman hath a Gallon of this Liquor, in a Glas Bottle, that weighs $3\frac{1}{2}$ *lb. Troy* out of Water; and to conceal it from the King's Officers, throws it overboard: The Question is, if it will sink, how much Force would just buoy it up?

Answer It is 12,8968 Ounces heavier than the same Bulk of Salt Water.

Another of the Mariners has half an Anchor of Brandy, of the specific Gravity above; the Cask, suppose, measures $\frac{1}{8}$ of a cubic Foot, and the solid Inch of Oak is known to be 192 $\frac{1}{2}$ Grains *Troy*: What Quantity of Lead, 5,984 Ounces *Troy* to the cubic Inch, is just requisite to keep the Cask and Liquor under Water?

Answer 84 Ounces *Troy* will just do it.

The absolute Weight of a Body floating in a Fluid, is precisely equal to the Weight of such Part of the Fluid as shall be thrust away thereby and displaced, or, in other Words, to the immerfed Part of the Body: Suppose then it be by Measurement found, that a Man of War, with all her Ordnance, Rigging and Appointments, draws so much Water as to displace 1300 Tons of Sea-Water, weighing specifically as above, and that the Measure be taken according to that of *London Beer*; the Weight of this Vessel is required?

Answer Cwt. 23981 . 0 . 4 . 9 $\frac{13}{100}$.

A General RELEASE.

K NOW all Men by these Presents, That I [*Henry Haveall, of London, Founder*] have remised, released, and for ever quitted Claim, and by these Presents, do for me, my Heirs, Executors and Administrators, remise, release, and for ever quit Claim, unto [*Lewis Lightpocket, Citizen and Lorimer of London*] his Heirs, Executors and Administrators, all and all manner of Actions, Cause and Causes of Actions, Suits, Bills, Bonds, Writings obligatory, Debts, Dues, Duties, Accompts, Sum and Sums of Money, Judgments, Executions, Extents, Quarrels, Controversies, Trespasses, Damages and Demands whatsoever, both in Law and Equity, or otherwise howsoever; which against the said [*Lewis Lightpocket*] I ever had, now have, and which I, my Heirs, Executors and Administrators, shall or may have, claim, challenge or demand, for or by Reason or Means of any Matter, Cause or Thing, from the Beginning of the World, to the Day of the Date of these Presents. *In Witness whereof*, I have hereunto set my Hand and Seal, [*the tenth Day of June, in the Year of our LORD, one Thousand seven Hundred and Forty* .]

Sign'd, Seal'd, Deliver'd (being
first legally Stamp'd) in Pre-
sence of

L. M.
N. O.

Henry Haveall, (L. S.)

A

A LETTER OF ATTORNEY.

K NOW all Men by these Presents, That I [*the Lady Elizabeth Goring, of the Parish of Hampton, in the County of Middlesex, Widow*] have made, ordain'd, constituted and appointed; and by these Presents, do make, ordain, constitute and appoint [*Edmund Wingate of Grays-Inn Esq;*] to be my true and lawful Attorney, for me, and in my Name, and for my Use, to ask, demand and receive of, and from [*Henry Long of St. Mary-la-bonne, Esq;* *Peter Randal of Pancras, Gent.* *Philip Ryley of Wandsworth, Dyer*; and *Jeremiah Holcomb of Islington, Inholder*] their Executors, Administrators or Assigns, as well, all such Sum and Sums of Money as now are, or which shall or may, at any Time hereafter become due, and owing to me; for, or on Account of Rent, for the respective Tenures, by them, or some of them now occupied and possessed; and upon Non-payment thereof, the said Person or Persons, his, or their Executors and Administrators, for me, and in my Name, to sue, arrest, imprison, implead, and prosecute for the same, and upon such Suit, to proceed to Judgment and Execution; and thereupon, the said Person or Persons, their or either of their Executors and Administrators in Prison, to hold and keep, until Payment thereof be made, with all Costs, and Damages sustain'd, and to be sustained, by reason of the detaining of the same: And upon Payment thereof, the said Person and Persons, their and either of their Executors and Administrators, forth of Prison, to discharge, and Acquittances for me, in my Name to make, seal and deliver; and also, to perform, pursue, and execute all and every such other lawful and reasonable Acts, Means, and Things whatever, both for recovering and discharging the same, as shall be needful to be done: Giving, and by these Presents, granting to my said Attorney, not only my full and absolute Power in the Premises himself; but also Power to substitute and appoint one or more Attorney or Attorneys in his stead, to act, execute, do, and perform all lawful Acts, Deeds, or Things, with relation to the Premises, and ratifying and holding firm, all and whatsoever my said Attorney, or his Substitutes before said, shall lawfully do, or cause to be done, in or about the Premises, by Vertue of these Presents. *In Witness whereof, I have hereunto set my Hand and Seal [the fourth Day of July, in the Year of our LORD, one Thousand seven Hundred and Forty .]*

Seal'd and Deliver'd, (being first
legally Stamp'd) in Presence of
Y. Z.
P. D.

Eliz. Goring, (L. S.)

FORM

FORM of a WILL.

In the Name of GOD. Amen.

I [*the Lady Arabella Earnly*] of [*Bromley, in the County of Kent, Widow*] being of perfect Mind and Memory, make this my last Will and Testament: *First*, I desire to be privately buried [*in the Parish Church of St. Anne, in the Liberty of Westminster, and that the Charges of my Funeral may not exceed forty Pounds.*] My temporal Estate, I bequeath and dispose of, in the following Manner. Imprimis, [*To my Daughter Alice, I bequeath the Sum of two thousand five hundred Pounds, my Indian Trunk, a Table Clock, and my Picture, done by Dahl.*] Item, [*To my Neice and God-daughter, Mary Peters, I bequeath my Diamond Ring, my Pearl Pendants, set with Brilliants, and an hundred Pounds to buy her Mourning.*] Item, [*To Mr. William Vernon, my Cousin, I bequeath the Sum of one Guinea to buy him a Ring.*] Item, [*To the poor of the Parish of Bromley aforesaid, I bequeath the Sum of ten Pounds to be paid to the Minister and Churchwardens, within ten Days after my Funeral, to be by them distributed as they see good, among their said Poor.*] The Residue, and Remainder of my Estate, Lands, Tenements, Hereditaments, with my Goods, Chattels, Plate and Jewels, India Bonds, Arrears of Rent, with all other Properties of what kind soever, to me appertaining, I give, devise, and bequeath [*To my Son Thomas*] whom I constitute and appoint [*the whole and sole*] Executor of this my last Will and Testament; and I do hereby utterly revoke, disallow, and disanul all former Bequests, Wills, and Legacies by me heretofore in any wise left or made, declaring, ratifying, and confirming this, and no other to be my last Will and Testament: *In Witness whereof*, I have hereunto set my Hand and Seal, this [*twelfth Day of May, in the Year of our LORD, one Thousand seven Hundred and Forty* .]

Sign'd, Seal'd, Publish'd and Declar'd, by the within nam'd Testatrix [*the Lady Arabella Earnley*] to be her last Will and Testament, in Presence of us, who subscrib'd our Names, in Presence of the said Testatrix.

C. D.

E. F.

I. H.

Arabella Earnly, (L. S.)

Three Witnesses are requisite to a Will, if it concern a real Estate; which Witnesses are to see each other sign it, as well as the Testator. If the Estate be personal only, two may do. The Law exempts Wills from being made on stamp'd Paper.

A BILL of SALE.

KNOW all Persons, whom it may concern: That I [Lazarus Lackcash of Norwich, in the County of Norfolk, Goldsmith] for and in Consideration of the Sum of [fifty Pounds] of lawful Money of Great-Britain, to me in Hand paid, by [Dives Doubledun of London, Esq;] the Receipt whereof I do hereby acknowledge, have bargain'd, sold and deliver'd; and by these Presents, according to the due Form of Law, do bargain, sell and deliver unto the said [Dives Doubledun, four Carraets of oriental Pearl; nine Grains of brist Diamonds; one Silver Teapot, weight twenty Ounces; one Silver Salver, weight ten Ounces; two Sets of Silver Casters, weight thirty Ounces; and ten Cornelian Rings, seal'd up, by Consent, with my Seal.] To have and to hold, the said bargain'd Premises, unto the said [Dives Doubledun] his Executors, Administrators, and Assigns for ever. And I the said [Lazarus Lackcash] for my self, my Executors and Administrators, the said bargain'd Premises unto the said [Dives Doubledun] his Executors, Administrators and Assigns, against all Persons, shall and will warrant, and for ever defend by these Presents: * *Provided nevertheless*, that if I the said [Lazarus Lackcash] my Executors, Administrators or Assigns, or any of us, do and shall, well and truly pay, or cause to be paid unto the said [Dives Doubledun] his Executors, Administrators or Assigns, the Sum of [Fifty one Pounds five Shillings, as Principal and Interest] lawful Money of Great-Britain, on the [first of November, next ensuing the Date hereof] for Redemption of the bargain'd Premises; then this Present Bill of Sale shall be void, and of none Effect: But if Default be made in the Payment of the said [fifty one Pounds five Shillings] in part, or in the whole, contrary to the Manner and Form before said; that then it shall remain and be in full Force and Virtue. In Witness whereof, I have hereunto set my Hand and Seal, the [first Day of May, in the Year of our LORD, one Thousand seven Hundred and Forty .]

Seal'd and Deliver'd, (being first legally
Stamp'd) in Presence of

P. D.
R. M.

Lazarus Lackcash, (L. S.)

* *If the bargain'd Premises be redeemable, by a limited Time, a Proviso of this Nature is added.*

A WARRANT OF ATTORNEY, to confess Judgment.

To [John Carpenter, John Davis, and John Hodges, Gent.] Attorneys of His Majesty's Court of [Common-Pleas at Westminster) jointly and severally, or to any other Attorney of the same Court.

THESE are to desire, and authorise you, the Attorneys above-named, any of you, or any other Attorney of the Court of [Common-Pleas] afore said, to appear for me [John Morris of Yatton, in the County of Somerset, Yeoman, in the said Court of Common-Pleas, the next Trinity Term, or any subsequent Term] and then and there to receive a Declaration for me, in an Action of [Debt for two hundred Pounds, besides Costs of Suit] at the Suit of [Robert Creighton, of the Liberty of St. Andrew in Wells in the County afore said, Doctor of Divinity] And thereupon to confess the same Action, or else to suffer a Judgment, by *He saith nothing, or I am not inform'd*, or otherwise to pass against me, in the same Action, and to be thereupon forthwith entered up against me of Record [in the same Court of Common-Pleas] And, for your so doing, this shall be to you, or any of you, or to any other Attorney as afore said, your, his, their, or any of their sufficient Warrant: *In Witness whereof*, I have set my Hand and Seal this [twenty-fifth Day of February, one Thousand seven Hundred Forty]

Seal'd and Deliver'd (being first
legally stamp'd) in Presence of,

G. S.

R. M.

John Morris, (L. S.)

Note, This Instrument is of great Force and Validity, and wards off that Opprobrium of our Constitution, the Expences and Delays of Law-Proceedings; especially if a Clause be inserted, promising no Writ of Error shall be brought or prosecuted upon it, in Bar.

A POLICY of ASSURANCE of a Ship and Cargo Out and Home.

KNOW all Men by these Presents, That *Clement Cautious* of *London*, Merchant, as well in his own Name, as for and in the Name and Names of all and every other Person and Persons, whom the same may or shall concern, doth make Assurance, and hereby cause himself and them, and each of them, to be assur'd, lost or not lost, at and from the Port of *London*, to the Port of *Alicant*, in the Kingdom of *Spain*, and at and from thence back to *London*, upon all kinds of Goods and Merchandises, and also upon the Body, Tackle, Apparel, Ordnance, Munition, Artillery, Boat, and other Furniture, of and in the good Vessel, called the *Bonny Tack*, Burthen two hundred and eighty Tons, or thereabout, whereof *Leonard Lookout*, for the present Voyage, is Master, beginning the Adventure upon the said Ship and Cargo, from and immediately following the Date hereof, and so to continue and endure, until the said Ship, with her said Wares and Merchantizes on Board, her Tackle, Apparel, Ordnance, Munition, Artillery, Boat, and other Furniture, shall arrive at the Port of *Alicant* as aforesaid, and during her abode and stay there; and farther, until the said Ship, with her Goods and Merchandises on Board, with all her Appointments and Furniture before said, shall arrive back at the Port of *London*, and hath there moor'd at Anchor four and twenty Hours in Safety, and upon the Goods and Merchandises, till they be there discharg'd and landed. And it shall be lawful for the said Ship, in this Voyage, to proceed and sail to, and touch and stay at any Ports and Places whatsoever; especially at *Lisbon*, and *Gibraltar*, without Prejudice to this Assurance. The said Ship and Cargo, for so much as concerns the Assureds, is and shall be rated and valued at six thousand five hundred Pounds *Sterling*, without farther Account to be given by the Assureds for the same: And touching the Adventures and Perils, which we the Assurers are content to bear, and do take upon us in this Voyage, they are of the Seas, Men of War, Fire, Enemies, Pyrates, Rovers, Thieves, Jetzons, Letters of Mart and Countermart, Surprizals and Takings at Sea, Arrests, Restraints, and Detainments of all Kings, Princes, and People of what Nation, Condition, or Quality soever, Barratry of the Master and Mariners, and of other Perils, Losses and Misfortunes, that have or shall come to the Hurt, Detriment or Damage of the said Ship, Wares and Merchandises, on Board her, or any Part thereof. And in case of any Misfortune, it shall be lawful for the Assured, their Factors, Servants and Assigns, to sue, labour, and travel for, in and about the Defence, Safeguard and Recovery of the said Ship, Wares and Merchandises, or any Part thereof, without Prejudice to this Assurance; to the Charges whereof, we the Assurers will contribute each of us according to the Rate and Quantity of his Sum herein insured. And so we the Assurers are contented, and do hereby promise and bind ourselves, each for his own Part, our Heirs, Executors, Goods and Chatels to the Assured, their Executors, Administrators and Assigns, for the true Performance of the Premises, confessing ourselves paid the Consideration due to us for this Assurance, by the

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the said *Clement Cautious*, at and after the Rate of two $\frac{1}{2}$ Cent. and in case of Loss, to abate ten $\frac{1}{2}$ Cent. and to pay without farther Proof of any Interest whatsoever, more than this present Policy, any Use or Custom to the contrary notwithstanding. *In Witness whereof*, we the Assurers have subscrib'd our Names and Sums by us severally assured in *London*, as follows, viz.

I *A. B.* am contented with this Assurance, for one thousand five hundred Pounds: Witness my } 1500 \textsterling .
Hand, *London*, Day of *Anno 174*.

I *C. D.* am contented with this Assurance, for eight hundred Pounds, &c., 800 \textsterling .

The Assureds chuse to have this Business transacted by several Hands, when a private Assurance is taken, to have the more certain Security.

AS Skill in MEASURING is almost necessary to make young People competent Judges of General Business; and the casting up the Contents of such things, as are the Subject of GEOMETRY, is to be effected by Numbers, as well as any Calculation whatever, some few Examples, express'd in a familiar Way, for the sake of the Beginner, are here subjoin'd; with Intention to give him a small Insight into this Affair, and to excite his Curiosity, to look into Authors that have treated this useful and delightful Subject more at large: Mean time, the judicious Master will take the Trouble to delineate and explain the Figures intended by the Propositions, in order to assist his Pupil in the Conception of what he is about: And such Eye-draught will, in great measure, point out, or suggest, the Method of Investigation.

R E C R E A T I O N XIX.

S U P E R F I C I A L M E A S U R E M E N T.

WHAT is to be measur'd upon the Surface only, as *Land, Glass, Painting, Flooring, Tiling, Paving, Plastering*, &c. if it be a four-sided Figure, whose opposite Sides are every where equally distant, multiplying the Length into the perpendicular Height, finds the superficial Content. And, consequently, the superficial Content, and any one of those Dimensions being given, the other of them will be found by Simple Division.

What

What Difference is there between a Floor, 28 Foot long, by 20 broad; and two others, that measure 14 Foot a-piece by 10; and what do all three come to, at 45 s. $\frac{1}{2}$ p^r Square; viz. 10 Feet by 10?

Answer 280 Sq. Ft. Diff. Amount, 18 l. 18 s.

A rectangular four-sided Room measures 120 Foot 6 Inches about, and is to be Wainscoted, at 3 s. 6 d. $\frac{1}{2}$ p^r Yard square: After the due Allowances, for Girt of Cornice and Members, 'tis 16 Foot 3 Inches high: The Door is 7 Feet, by 3 Feet 9: The Window-Shutters, 2 Pair, are 7 Foot 3, by 4 Foot 6: The Cheek-boards round them, come 15 Inches below the Shutters, and are 14 Inches in breadth: The Lining-boards round the Door-way, are 16 Inches broad: The Door and Window-Shutters, being wrought on both sides, are reckon'd as Work and half, and paid for accordingly: The Chimney 3 Foot 9, by 3 Foot, not being inclosed, is to be deducted from the superficial Content of the Room; and the Estimate of the Charge is required?

Answer 44 l. 4 s. 6 d.

When a Roof is of a true Pitch, the Rafters are $\frac{1}{4}$ of the Breadth of the Building; now supposing the Eave's Boards to project 10 Inches on a Side: What will the new riving an Out-house cost, that measures 32 Foot 9 In. long, by 22 Foot 9 In. broad, upon the Flat, at 15 s. $\frac{1}{2}$ p^r Square?

Answer 8 l. 15 s. 9 $\frac{1}{2}$ d.

If my Court-Yard be 47 Foot 7 Inches Square, and I have laid a Foot-way of Purbeck Stone, 4 Foot wide, along one side on't: What will paving the rest, with Flints, come to, at 6 d. $\frac{1}{2}$ p^r Yard Square?

Answer 5 l. 15 s. 2 $\frac{1}{2}$ d.

A square Ceiling contains 114 Yards, 6 Foot of Plaist'ring, and the Room 28 Foot broad: What was the Length of it?

Answer 36 Foot $\frac{1}{2}$.

An Elm Plank is 14 Foot 3 Inches long, and I would have just a Yard square slit off; at what Distance; from the Edge, must the Line be struck?

Answer 7 Inches $\frac{1}{2}$.

Having a rectangular Marble Slab, 58 Inches by 27; I would have a Foot square cut off, parallel to the shorter Edge; I would then have the like Quantity divided from the Remainder, parallel to the longer Side; and this alternately repeated, 'til there should not be the Quantity of a Foot left: What will the Dimensions of the Remnant be?

Answer 20,7 Inches, by 6,086.

Being about to plant 10584 Trees equally distant in Rows; the Length of the Grove must be 6 times the Breadth: How many of the shorter Rows will there be?

Answer 252 Rows, viz. $\frac{1}{2}$ of the Trees are to form an exact Square, the Side whereof shews, how many come into a short Row.

I would set 3584 Plants in Rows, each 4 Foot asunder, and the Plants 7 Foot apart, in a rectangular Plat of Ground: What Land will this take up?

Answer 1 Acre, 24 $\frac{1}{4}$ Poles.

RECREATION.

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A common Joist is 7 Inches deep, and $2\frac{1}{2}$ thick; but I want a Scantling just as big again, that shall be three Inches thick: What will the other Dimension be?

Answer 11 Inches $\frac{3}{4}$.

I have a square Girder, 19 Inches by 11; but one of a quarter of the Timber in it, provided it be 9 Inches deep, will serve: How broad will it be?

Answer 5 Inches $\frac{3}{8}$.

I have a Wooden Trough, that at 6 *d.* per Yard, cost me 3 *s.* 2 *d.* Painting within; the Length of it was 102 Inches, the Depth 21 Inches: What was its Breadth?

Answer 2 Feet, $3\frac{1}{2}$ Inches.

My Plummer has put 28 *lb.* per Foot square into a Cistern, 74 Inches and twice the Thickness of the Lead long, 26 Inches broad, and 40 deep; he has put three Stays within across it 16 Inches deep, of the same Strength, and reckons 22 *s.* per Cwt. for Work and Materials: I being a Mason, have pay'd him a Work-shop, 22 Foot 10 Inches broad, with *Purbeck* Stone, at 7 *d.* per Foot, and upon the Balance, I find there is 3 *s.* 6 *d.* due to him: What was the Length of his Work-shop.

Answer 31 Foot, $9\frac{1}{2}$ Inches.

The rectangular Powdering Trough of a Man of War measures 27 square Foot 112 Inches, the Depth is 20 Inches, the Breadth 16: The Length is sought?

Answer 5 Foot.

In 110 Acres of Statute-Measure, in which the Pole is $16\frac{1}{2}$ Foot long; how many *Cheshire* Acres, where the customary Pole is 6 Yards long; and how many *Yorkshire*, where the Pole, in Use, is 7 Yards in Length?

Answer *Cheshire* Acres, 92 . 1 . 28 *Yorkshire* Acres, 67 . 3 . 25.

A triangular or three-sided *Figure*, (being the half of a four-sided one of the same Height and Length) if you multiply the Base, or longest Side, by the shortest Height, you have double the Content.

A triangular Field, 738 Links long, and 583 in the Perpendicular, brings in 12 *l.* a Year: What is it set at an Acre?

Answer 5 *l.* 11 *s.* $6\frac{1}{2}$ *d.* nearly.

The End-Wall of an House, is 24 Foot 6 Inches in breadth, and 40 Foot to the Roof; $\frac{1}{3}$ of which is 2 Bricks thick; $\frac{1}{3}$ more, 1 $\frac{1}{2}$ Brick thick; and the rest 1 Brick thick: Now the Gable rises 38 Course of Bricks (4 of which usually make a Foot in depth) and this is but 4 Inches, or half a Brick thick: What will this Piece of Work come to, at 5 *l.* 10 *s.* per Statute Rod, the Dimensions of which are given Page 44 of this Treatise?

Answer 20 *l.* 11 *s.* $7\frac{1}{2}$ *d.* nearly.

When the Perpendicular of a Triangle cannot readily be taken, the Content may be found by the Measure of the Sides, *thus*: Subtract each of the three Sides, from half the Sum of the three Sides, severally; then multiply the

the said half Sum, with the three Differences found, continually; and the square Root of the Result, shall be the Area or Content of the Triangle sought.

Having a Fish-pond of a triangular Form, whose three Sides measure 400 Yards, 348, and 312: What Quantity of Ground does it cover?

Answer 52284 $\frac{1}{2}$ square Yards.

The Quarry of Glass 3 $\frac{1}{2}$ Inches on every Side, and as much cross the middle, costs 1 d. the Square is 5 $\frac{1}{2}$ Inches, by 3 $\frac{1}{2}$, and costs 1 $\frac{1}{2}$ d. what will be saved, by glazing 1000 Foot, the cheaper of the two Ways; supposing the Leading of the Lights to be nearly equal, in either kind of Work?

Answer 2 l. 10 s. 3 $\frac{1}{2}$ d.

Every other right-lin'd Figure, be it regular or not, may be divided into Triangles; the Sum of whose Areas, is the Content; for Example.

A Piece of Garden-Box, lies in Form of a regular Pentagon, or Figure of five equal Sides, each 48 Foot; and from the Centre of the Figure, to the middle of one of these, it measures 41,57 Foot nearly. The Area of the Figure will be the Content of these five Triangles; pray what is that?

Answer 4988,4 Foot.

The Square of the Hypotenuse, or the longest Side of a right-angled Triangle, is equal to the Sum of the Squares of the other two Sides; and consequently, the Differences of the Squares of the Hypotenuse, and either of the other Sides, is the Square of the remaining Side.

I want the Length of a Shoar, that being to strut 11 Foot from the Upright of a Building, will support a Jamb, 23 Foot 10 Inches from the Ground?

Answer 26 Foot, 3 Inches nearly.

A Line, 27 Yards long, will exactly reach from the Top of a Fort, on the opposite Bank of a River, known to be 23 Yards broad; the Height of the Wall is requir'd?

Answer 42 Foot, 5 Inches.

Two Ships yet sail from the same Port, one of them goes due East, 50 Leagues; the other, due North, 84: How far are they then asunder.

Answer 97 $\frac{1}{2}$ Leagues.

The Height of an Elm, growing in the middle of a circular Island, 30 Foot in Diameter, plumbs 53 Foot; and a Line, stretch'd from the Top of the Tree, streight to the higher Edge of the Water, 112 Foot: What then is the Breadth of the Moat, supposing the Land on either side the Water to be level?

Answer 83 Foot $\frac{2}{3}$.

Suppose a Light-house built on the Top of a Rock; the Distance between the Place of Observation, and that Part of the Rock level with the Eye, and directly under the Building, is given 310 Fathoms; the Distance from the Top of the Rock, to the Place of Observation, is 423 Fathoms; and from the Top of the Building 425: The Height of the Edifice is requir'd?

Answer 16 $\frac{1}{2}$ Feet nearly.

R E C R E A T I O N.

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A Ladder, 40 Foot long, may be so planted, that it shall reach a Window 33 Foot from the Ground, on one Side the Street; and without moving it at the Foot, will do the same by a Window 21 Foot high, on the other Side: The Breadth of the Street is requir'd?

Answer 56 $\frac{5}{16}$ Foot.

An antient Bath was found, of a triangular Form, the Sum of whose three equal Sides was 125 Foot: The Area of the Bottom is requir'd?

Answer 751 $\frac{1}{2}$ square Foot.

The Paving of a triangular Court, at 18 *d.* $\frac{1}{2}$ Foot, came to 100 *l.* the longest of the three Sides was 88 Foot: What then was the Sum of the other two equal Sides?

Answer 106,85 Foot.

I would plant 10 Acres of Hop-Ground, which must be done, either in the *square* Order, or as the Number 4 stands on the Dice, or in the *quincunx* Order, as the Number 5; the nearest Binds, in both Cases, must be set just 6 Foot asunder: How many Plants more will be required, for the last Order than for the first?

Answer 3744.

A Summer-House is a Cube of 10 Foot in the clear, the Cornice of which projects just 15 Inches on a Side, so that the whole Front of the Roof, from out to out, is 13 $\frac{1}{2}$ Foot. This is hipped off from each of the Corners to the Centre, and being truly Pediment-pitch, it rises $\frac{2}{3}$ of the Front, or 3 Feet. I would, by help of these Dimensions, measure the Slating without venturing to climb for more, and compute the Cost at 3 $\frac{1}{2}$ *d.* $\frac{1}{2}$ square Foot. This may be done by first discovering what the diagonal Line on the Flat is transversely from Corner to Corner. And, secondly, from thence and the perpendicular Rise of the Roof, the Length of each of the 4 principal Rafter. And then, thirdly, from the Breadth of the Front given, a Perpendicular may be found, which will determine the Cost of this Piece of Work to be 2 *l.* 18 *s.* 2 *d.* nearly.

There are two Columns, in the Ruins of *Persepolis*, left standing upright; one is 64 Foot above the Plane, the other 50: Between these, in a right Line, stands an antient Statue, the Head whereof is 97 Foot from the Summit of the higher, and 86 Foot from the Top of the lower Column; the Base whereof measures just 76 Foot to the Centre of the Figure's Base: By these Notices, the Distance of the Top of the Columns may be, by Numbers, easily found?

Answer 157 Foot.

A triangular Bath, 6 Foot deep, is exactly inclosed by 3 square Pavillions, and is consequently rectangular, the Sum of whose Plans, together, make just 50 Poles: The Area of *A.* the less, is to that of *B.* the middle one, as 4 $\frac{1}{2}$ to 8; and the Sum of the Areas of *A.* and *C.* the biggest, is to that of *B.* as 8 $\frac{1}{2}$ to 4: How many Wine-Hogheads of Water will this Bath receive?

Answer 1163 Hogheads, 47 $\frac{1}{2}$ Gallons.

Q

A

A four-sided *Figure*, whose Sides are unequal, is call'd a *Trapeze*: I have an Orchard of that Form, containing $3\frac{1}{4}$ Acres, which being divided by a Diagonal, or a Line, from Corner to Corner, the Perpendicular of one of the Triangles is 430 Links, and the other 360: The Length of the said Diagonal, or common Base of those Triangles, is requir'd?

Answer 949 $\frac{2}{3}$ Links.

The Areas of *Circles* are found, either by multiplying half the Circumference, by half the Diameter, or by multiplying the Square of the Diameter, by .7854, that being the Area of the Circle, whose Diameter is 1.

Give the Area of a circular Bowling-Green, that is 16 Poles across the Middle; the Circumference being 3,1416 times the Diameter of a Circle?

Answer 1 Acre, 41 Pole, &c.

I would turf a round Plat, measuring 130 Foot about; and would know the Charge at 4d. $\frac{1}{2}$ Yard Square?

Answer 2l. 9s. 10d. nearly.

I want the Length of a Line, by which my Gardiner may strike a round *Aurangerie*, that shall contain just half an Acre of Land?

Answer 27 $\frac{3}{4}$ Yards nearly.

Agreed for an oaken Curb to a round Well, at 8d. $\frac{1}{2}$ Foot square; it is exactly 42 Inches in Diameter, within the Brick-work, and the Breadth of the Curb is to be 14 $\frac{1}{2}$ Inches: What will it come to?

Answer 11s. 11d. nearly.

It is observed that the extreme End of the Minute-hand of a public Dial moves just 5 Inches in the Space of 3 $\frac{1}{4}$ Minutes: The Question is what is the Length of that Index?

Answer 14,69 Inches.

A. B. C. join for a Grind-stone, 36 Inches over, value 20s. toward which A. paid 7s. B 8s. and C 5s. The Waste-hole, through which the Spindle passed, was 5 Inches Square: To what Diameter ought the Stone to be worn, when B. and C. begin severally to work with it?

Answer, For B. to 29,324 Inches; for C. to 19,013 Inches.

As the Diameter of a Circle, is the only necessary Dimension to find the greatest Square that may either be inscrib'd, or the smallest that may be circumscrib'd: I demand what Difference there is in the Area of the Section of a round Tree, 20 Inches over, consider'd both those ways; and how far the Result, from each of those Dimensions, differs from the Truth in the circular Measure?

Answer, Within 114,16 Inches too little; without 85,84 Inches too much.

Having pay'd a Semi-circular Alcove with black and white Marble, at 2s. 4d. $\frac{1}{2}$ Foot, the Mason's Bill was just 10l. what then was this Arch in Front; considering, that as .7854, the Area of the Circle, the Square of whose Diameter is 1, is to 1; so is the Area of any other Circle, to the Square of its Diameter?

Answer 14 Foot 9 Inches.

Multiplying

Multiplying half the Arch by half the Diameter, also finds the Area of a *Sector*; that is, any Part of a Circle cut through, from the Centre to the Circumference.

The Area of a *Sector* (suppose one of the Divisions of a Wilderness) which being struck from a Centre, with a Line 30 Yards long, makes the Sweep, or circular Part, 63 Foot, is requir'd?

Answer 315 Yards.

The Curvature of one of these *Sectors* being parted off by a strait Line, drawn through its Limits, leaves a *Segment of a Circle*, to be measur'd, by deducting the Content of the Triangle, cut off from the Area of the whole *Sector*, to discover the Area of the *Segment*.

The Proposition above may serve as an Example to this, allowing the Chord, or straight Line, drawn through the two Ends of the Curve (as it will be found) about 15 Inches shorter, than the arch'd Line abovesaid.

Content of the Segment, 25 Yards nearly.

An *Ellipse* or *Oval* is measur'd by multiplying the Product of the long and short Diameters, by ,7854, as in the Circle, and this will give the superficial Content.

The *Ellipse* in *Grosvenor* Square measures 840 Links the longest Way, and 612 across, within the Rails; the Walls are 14 Inches thick; what Ground do they inclose, and what do they stand upon?

Answer, Inclose 4 Acres 6 Pole. Wall stands on 879,12728 square Feet nearly.

The Dimensions of all similar Figures are in Proportion to their Areas, as the Squares of their respective Sides, *et contra*.

If a round Pillar, 7 Inches over, has 4 Foot of Stone in it; of what Diameter is the Column, of equal Length, that measures ten times as much?

Answer 22,136 Inches over.

A Pipe of six Inches Bore will be 3 Hours in running off a certain Quantity of Water: In what time will 4 Pipes, each 3 Inches Bore, be in discharging double the Quantity?

Answer, 6 Hours.

A Yard of Rope 9 Inches round weighs, suppose, 22 lb. what will a Fathom of that weigh, which measures a Foot about?

Answer, 78 $\frac{2}{3}$ lb..

If 20 Foot of Iron-Railing shall weigh half a Ton, when the Bars are an Inch and quarter square, what will 50 Feet of *Ditto* come to, at 3 $\frac{1}{2}$ d. per Pound; the Bars being but $\frac{7}{8}$ of an Inch Square?

Answer, 20 l.

A Looking-glass is 16 Inches by 9, and contains a Foot of Glass: What will the Content of the Plate be that has twice the Length, and three times the Breadth?

Answer, 6 Sq. Foot

A Sack that holds 3 Bushels of Corn is 22 $\frac{1}{2}$ Inches broad when empty; what wou'd the Sack contain that, being of the same Length, had twice its Circumference, or twice its Breadth?

Answer, A Quarter and a half.

RECREATION XX.

MEASUREMENT OF SOLIDS.

Multiply the Area by the Depth, to find the Solidity of uniform Bodies, or such as are equal from Top to Bottom.

What is the Difference of a solid half Foot, and half a Foot solid?

Answer, One is but $\frac{1}{2}$ of the other.

What is the Proportion, in point of Space, between a Room 25 $\frac{1}{2}$ Foot long, 20 Foot 2 Inches broad, 14 Foot high, and two others of just $\frac{1}{2}$ the Dimensions?

As 4 to 1.

Another Room is 17 Foot 7 Inches long within; 13 Foot 10 Inches broad, and 9 Foot 6 Inches high; it has a Chimney carried up streight in the Angle, the Plan whereof is just the half of 5 Foot 6 Inches, by 4 Foot 2: The Question is, how many cubic Foot of Air the same will contain, allowing the Content of the Fire-place and Windows at 4 solid Yards?

Answer, 2309 Foot, 10 $\frac{1}{2}$ Inches.

A Ship's Hold is 112 Foot 6 Inches long, 32 broad, and 5 Foot 6 deep; how many Bales of Goods 3 Foot 4 Inches long, 2 Foot 4 Inches broad, and 3 Foot deep, may be stowed therein, leaving 1 Gang-way the whole Length of 4 Foot and $\frac{1}{2}$ broad?

Answer, The Quantity of 729 $\frac{1}{4}$ nearly.

I want a rectangular Cistern, that at 16 *lb.* to the Foot Square, shall weigh just a Fodder of Lead, it must be 8 Foot long, and 4 $\frac{1}{2}$ over; how many Hogheads, Wine Measure, will this contain, taking it at $\frac{1}{2}$ of an Inch from the Top?

Answer, 16 Hogheads 40 Gallons.

A Log of Timber is 18 Foot 6 Inches long, 18 Inches broad, and 14 thick, Die-square all through: Now, if 2 solid Foot and $\frac{1}{2}$ be saw'd off the End; how long will the Piece then be?

Answer, 17 Foot $\frac{71}{80}$.

The solid Content of a square Stone is found to be 126 $\frac{1}{4}$ Foot, its Length is 8 Foot 6 Inches; what is the Area of one End, and what the Depth, if the Breadth assigned be 38 $\frac{1}{2}$ Inches.

Answer, 55,55 Inches deep.

The Dimensions of the circular *Winchester* Bushel are 18 $\frac{1}{2}$ Inches over, and 8 Inches deep; how many Quarter of Grain then will the square Bin hold, that measures 7 Foot 10 long, 3 Foot 10 broad, and 4 Foot 2 deep within?

Answer, 12, &c.

Taking the Dimensions of the Bushel, as above, what must the Diameter of the circular Measure be, which at 12 Inches deep will hold 9 Bushels of Sea-Coal struck?

Answer, 45 Inches $\frac{3}{10}$.

A Prism of two equal Bases, and six equal Sides, that measures 28 Inches cross the Centre, from Corner to Corner; the superficial and the solid Content is requir'd, taking the Length at 134 Inches?

Answer, Superf. 9 Yards, 4 Foot, 3 Inches. Solid 39 Foot, 819 Inches.

I have

I have a rolling Stone 44 Inches in Circumference, and am to cut off 3 cubic Foot from one End; whereabouts must the Section be made?

Answer, At 33,66 Inches.

I would have a Syringe an Inch and $\frac{1}{4}$ in the Bore, to hold a Pint Wine-Measure of any Fluid; what must the Length of the Piston, sufficient to make an Injection with it, be?

Answer, 23,5294 Inches.

I would have a cubic Bin made capable of receiving just $13\frac{1}{2}$ Quarters of Wheat, Winchester-Measure; what will be the Length of one of its Sides?

Answer, 61,4678 Inches.

A Bath Stone, 20 Inches long, 15 over, and 8 deep, weighs 220 lb. how many cubic Foot thereof will freight a Ship of 290 Tons?

Answer, 4101 Foot.

The common Way of measuring Timber, being to girt a round streight Tree in the middle, and to take $\frac{1}{4}$ of the Girt for the side of a Square, equal to the Area of the Section there; if this be not consider'd in the Price appointed, pray on which Side lies the Advantage?

Answer, For the Buyer near 13 Foot in a Load.

The *Cylinder*, *Globe*, and *Cone*, are in proportion to one another, as 3, 2, and 1. The Cube therefore of the Diameter, of any Cylinder of equal Height and Breadth, multiply'd by ,7854, the Area of the Circle, whose Diameter is 1, will always give the Solidity of that Cylinder. The Cube of the Diameter of a Globe again multiply'd by $\frac{2}{3}$ thereof or ,5236, gives the solid Content. And the said Cube, multiply'd by $\frac{1}{2}$ of that, or ,2618, produces in general the Solidity of any Cone whose Breadth and Height are equal. By this Rule the solid Content of a Globe, 20 Inches in Diameter, a Cylinder of the same Diameter, 20 Inches long; and a Cone 20 Inches Diameter at Base, and 20 Inches high, are severally requir'd?

Cone, 2094,4. Globe, 4188,8. Cylinder, 6283,2.

The superficial Content of these is found by considering the *Cylinder*, as a square Surface 20 Inches by the Circumference, adding a double Area for the two Bases. The *Globe*, as a Rectangle of the Diameter and Circumference; and the *Cone*, as a Triangle, whose Base is the Circuit, and Perpendicular the slope Height, adding once the Area of the Base. At 8 d. $\frac{1}{4}$ Yard, the Painting of them is found to amount to 2 s. $1\frac{1}{2}$ d.

Our Satellite the Moon is a Globe, in Diameter 2170 Miles; I require how many Quarter of Wheat she would contain, if hollow, 2150 $\frac{1}{4}$ solid Inches being the Bushel; and how much yard-wid^e Stuff would make her a Waistcoat, was she to be cloth'd?

Answer, Content 79107034948470144000 Quarters. Surface 45824284391424 Yards Sq.

Supposing the Atmosphere, or Body of the Air and Vapours, surrounds the Globe of the Earth and Sea, to 60 Miles above the Surface; the Earth is 7970 Miles in Diameter; how many cubic Yards of Air then hang about, and revolve along with this Planet; and what is the Weight of the whole Mass of fluid Matter in the Atmosphere contain'd, if at a Medium 12 l. *Avoirdupois* be found experimentally, as in Fact it is, to press upon every circular Inch, on the Surface of the Earth?

Answer, Measure 66264254274148761600 solid Yds. Weight 1224019163676672000 Pds. *Avoirdupois*.

When Figures run uniformly taper (but not to a Point) they are to be consider'd as *Frustums* or *Portions* of the Cone or Pyramid; by supplying, therefore, what is wanting to make the Figure entire, and then deducting the Part cut off, we find the Solidity of the Part proposed.

A round

RECREATION.

A round Mash-Vat, measures at the Top 72 Inches over within, at the Bottom 54, the perpendicular Depth being 42 Inches; the Content in Ale Gallons is required?

In order to complete the Cone, use this Analogy: As half the Difference of the Top and Bottom 9 Inches, are to the Depth 42 Inches; so is half the greater Diameter 36 Inches, to the Altitude of the whole Cone.

It holds Gall. 467, and almost a half.

Or else; to the Areas of the Top and Bottom, add the square Root of the Products of those Areas, and this multiply by $\frac{1}{3}$ of the Height of the *Frustum*, for the Solidity.

The Shaft of a round Pillar, 16 Inches in Diameter at the Top, is about 8 of the Bottom Diameters in Height, $\frac{2}{3}$ whereof is truly cylindrical, and the other $\frac{1}{3}$ swelling, but we'll suppose it tapers straight; it is $\frac{1}{8}$ less at Top than at Bottom; the Price of the Stone and Workmanship is sought at 3 s. 6 d. per cubic Foot; and farther the superficial Content, including both Ends?

Answer, 3 l. 10 s. 4 $\frac{1}{2}$ d. &c. Superf. 61 $\frac{1}{10}$ Foot.

A triangular Pyramid, whose Sides, at Base, measure 30 Inches a-piece, and is 21 Foot high, per the Slope, is to be sold at 7 s. per solid Foot; and if the polishing the Surface will be 8 d. per Foot more, I would know the Cost of this Stone when finish'd?

Answer, 9 l. 5 s. 2 d.

A Stick of square Timber tapers straight; the Side at the greater End is 19 $\frac{1}{2}$ Inches, at the less, 13 $\frac{1}{2}$ Inches, the Length 16 Foot 6 Inches, the Value, at 2 s. 6 d. per Foot solid, is demanded?

Answer, 3 l. 18 s. 10 d.

To measure a common Cask: Find the Areas at Head and Bung, add $\frac{1}{3}$ of the less, and $\frac{2}{3}$ of the greater, for a mean Area; this multiply'd by the Length of the Cask is its Solidity in Inches, which reduce. Or, II. To double the Square of the Bung Diameter, add that of the Head; then multiply by the Length of the Cask, and divide by 1077,24 for Beer, or by 882,42 for Wine Gallons.

What Quantity of Brandy will the Distiller's Tun contain that measures 40 Inches within at Head, 52 at Bung, and is 100 Inches long; and how many Barrels of London Ale would fill it?

Answer; Brandy 794 &c. Ale 20 Bar. 10 $\frac{1}{2}$ Gall.

F I N I S.



ADDENDA & CORRIGENDA.

BESIDES a few literal Mistakes, the Reader will please P. 6. l. 15. to obliterate *to*. P. 46. l. 30. to alter by $\frac{1}{2}$ Miles, to 69 $\frac{1}{2}$ Miles. At the Bottom of P. 55. to add what follows,

No Bill of Exchange ought, in other Cases, to be paid by the Acceptor before 'tis *fully* due, without the *Allowance* and even *Direction* of the Remitter in Writing. For as the Remitter delivered his Money to the Drawer, in order to have it paid again, at a *limited* time, to such Persons as *he shall direct*, it is and ought to be in his Power, to *guide* and even to *divert* the Payment, by altering the Bill, and making it payable to any *other* Person whomsoever *he shall think fit*, during the whole Time, between that of Acceptance and the Day of Payment. And shou'd the Acceptant pay it *inadvertently* to any one, and that Person happen to fail *before* it falls *really* due, he will be liable to pay it to the Remitter a *second* Time.

P. 97. l. 22. to read 3 Pump-*rods*. And Ibid. l. 34. how much *more*.

